

SHARP®

MODEL

65" DISPLAY

LC-65G5X

AVC SYSTEM

TU-65GAX

LCD COLOUR TELEVISION

OPERATION MANUAL

AQUOS



1bit
Technology

VIRTUAL
DOLBY
SURROUND
PRO LOGIC II

BBE
Mach3Bass
DIGITAL

LC-65G5X TU-65GAX

LCD COLOUR TELEVISION

ENGLISH

OPERATION MANUAL

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Dear SHARP customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

Trademarks

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

- Manufactured under license from BBE Sound, Inc.
Licensed by BBE Sound, Inc. under USP5510752 and 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.
- BBE Mach3Bass extends the bass response of a given loudspeaker and provides deep, tight and musically accurate bass frequencies.

Important Safety Precautions

- **Cleaning**—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.

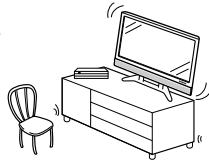
- **Water and moisture**—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.



- **Do not place vases or any other water-filled containers on this product.**
The water may spill onto the product causing fire or electric shock.



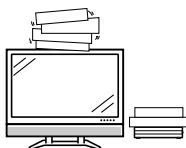
- **Stand**—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.



- **When relocating the product** placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.



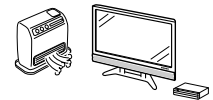
- **Ventilation**—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



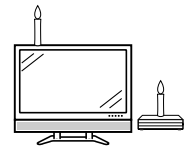
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is struck forcefully or with a sharp object. If the LCD panel is broken be careful not to be injured by broken glass.



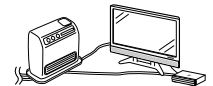
- **Heat sources**—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).



- **To prevent fire, never place any type of candle or naked flames on the top or near the TV set.**



- **To prevent fire or shock hazard, do not place the AC power cord under the TV set or other heavy items.**



- **Do not place heavy objects on this product or stand on it.** Doing so could cause injury if the product overturns. Take special care near children and pets.



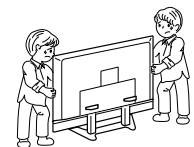
The LCD panel is a very high technology product with 6,220,800 thin film transistors, giving you fine picture details.

Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red.

This is within product specifications and does not constitute a fault.

Precautions when transporting the Display

When transporting the Display, never carry it by holding onto the speakers. Be sure to always carry the Display by two people holding it with two hands—one hand on each side of the display.



Do not display a still picture for a long time, as this could cause an afterimage to remain.

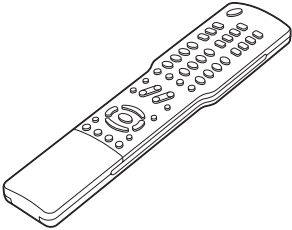
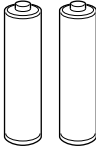
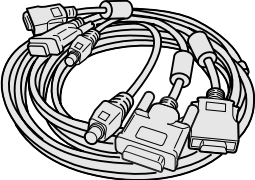
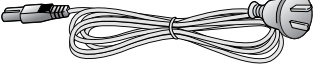
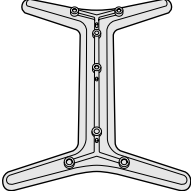
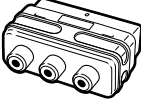
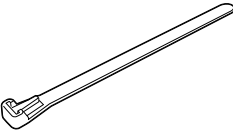
- **Selecting the location**—Select a place with no direct sunlight and good ventilation.



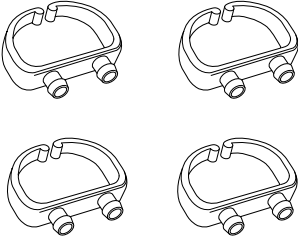
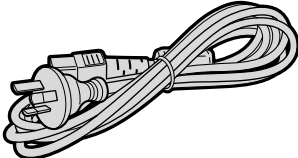
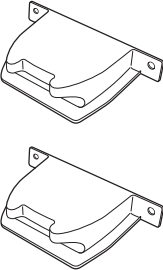
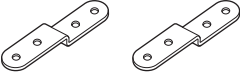
Supplied accessories

Make sure the following accessories are provided with the product.

AVC System

Remote control unit	"AAA" size battery (×2)
	
Page 12	Page 12
System cable	AC cord
	
Page 7	Page 7
Stand unit (for AVC System)	RCA/SCART conversion connector (×3)
   	 For INPUT2 and 3 (×2)  For INPUT1 (×1) Pages 44 and 45
Stand (×1) Stand cushion (×4) Stand spacer (×4) Stand screw (×2) Page 9	Cable tie (×1)
	
	Page 7
	• Operation manual

Display

Cable clamp (×4)

Page 8
AC cord

Page 7
Stand hole cover (×2)

Page 11
Safety restraints
 
Restraining band (×2) Screw for band (×4) Page 67

NOTE

- Always use the AC cord supplied with the product.
- The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from the actual operations.

Preparation

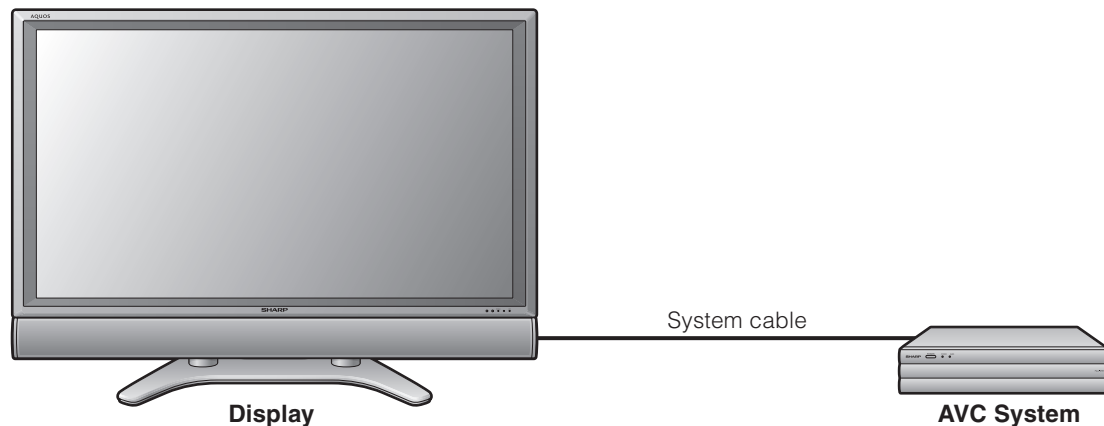
Where to place the System

“System” means the Display and AVC System. First select the location where to place the System.

1

Selecting the location of the System

- Select a place with no direct sunlight and good ventilation.
- Select a place where it is flat and without a slope.
- The Display and the AVC System are connected by the system cable.
(See page 7 for details.)



2

Setting the System in place

Handling the Display

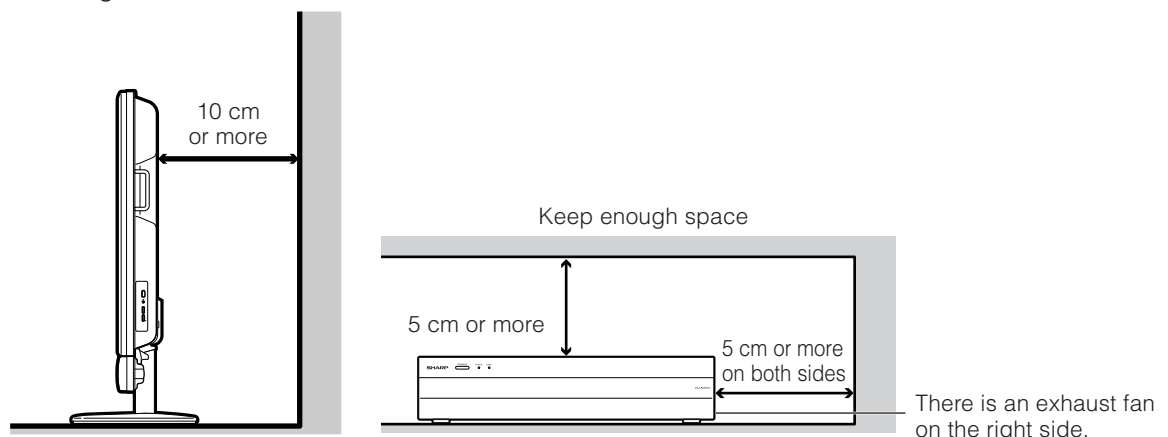


- **When using the Display with the supplied stand attached, do not remove the speaker. Doing so may disturb the balance leading to product damage or personal injury.**
- Do not remove the stand and speaker from the Display unless using an optional bracket to mount it.
- Keep enough space above and behind the Display.
- When you move the System, carry it by two or more people.
- When you move the Display, hold the portion of the Display, not the speaker.

Handling the AVC System



- Do not put a VCR or other device on the AVC System.
- Keep enough space above and on the sides of the AVC System.
- Do not block the ventilation openings on the top and left side, and the exhaust fan on the right side.
- Do not spread a thick cloth beneath the AVC System, or cover it with one, as this can cause overheating and result in malfunction.

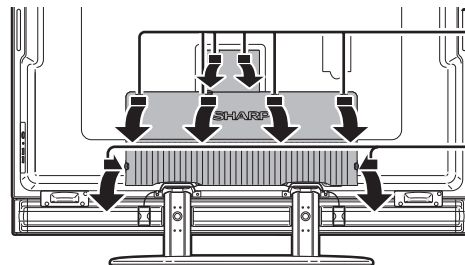


Setting the System

After putting the Display and the AVC System in place, connect the system cables and AC cords. Use the cable clamps for bundling the cables.

1 Removing the terminal cover

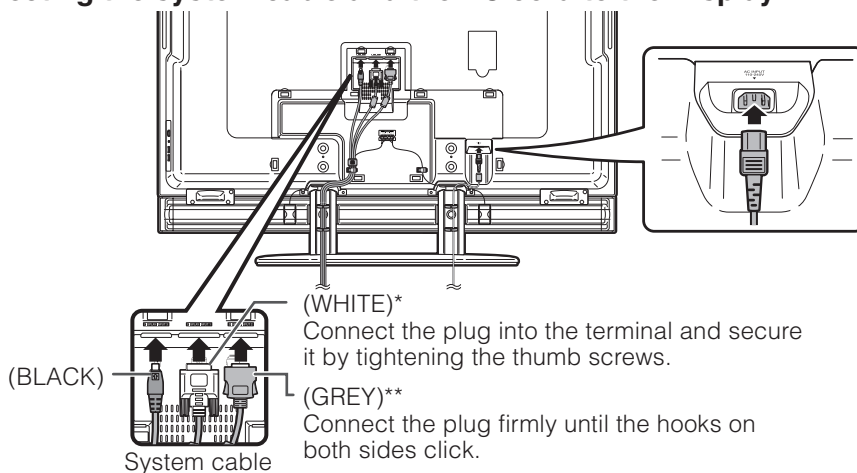
Display (rear view)



Press down the six upper hooks to remove the cover toward you.

Press the two hooks toward the centre of the Display and remove the cover toward you.

2 Connecting the system cable and the AC cord to the Display



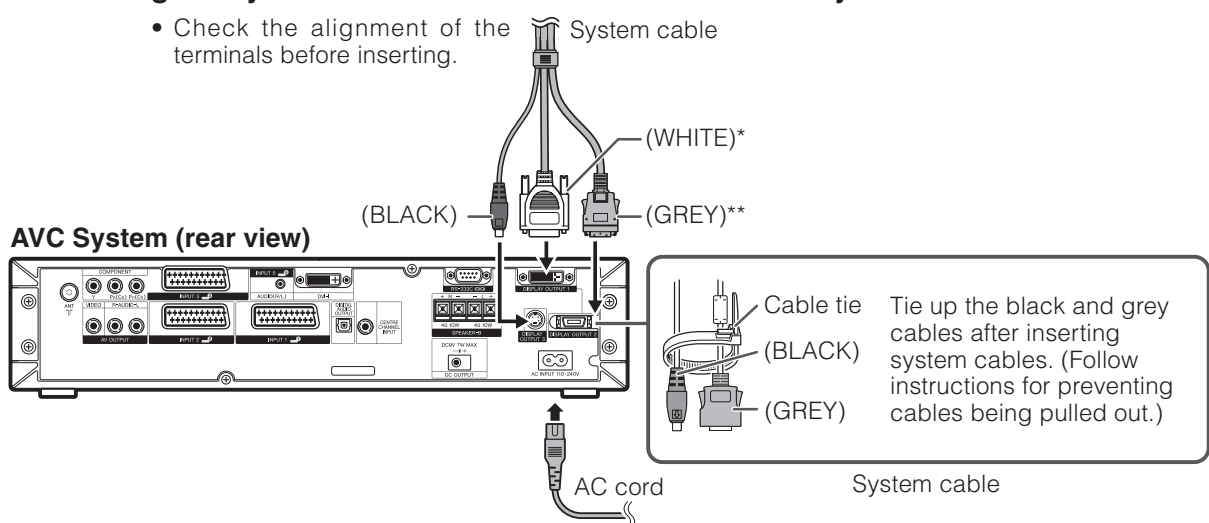
AC Cord
• Plug in the AC cord completely into the terminal.

(WHITE)*
Connect the plug into the terminal and secure it by tightening the thumb screws.

(GREY)**
Connect the plug firmly until the hooks on both sides click.

3 Connecting the system cable and the AC cord to the AVC System

- Check the alignment of the terminals before inserting.



Cable tie
(BLACK)
(GREY)
Tie up the black and grey cables after inserting system cables. (Follow instructions for preventing cables being pulled out.)

CAUTION

- TO PREVENT RISK OF ELECTRIC SHOCK, DO NOT TOUCH UN-INSULATED PARTS OF ANY CABLES WITH THE AC CORD CONNECTED.

NOTE

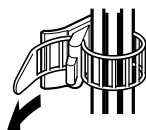
- * When you unplug the WHITE system cable, make sure you unscrew the screws thoroughly before unplugging the cable.
- ** When you unplug the GREY system cable, press the hooks on both sides of the cable inward as you unplug the cable gently.

4

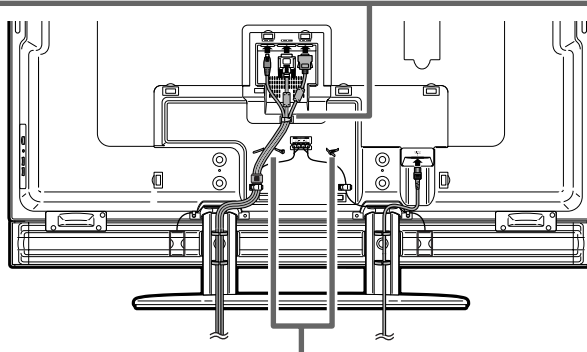
Attaching the clamp and bundling the cables with the clamp

Fit the band around system cables.

- ① Pass the end of the band through the hole.



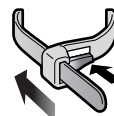
- ② Pull the band toward you and fasten to the tab.



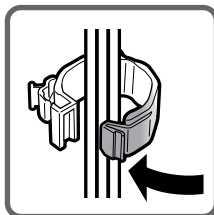
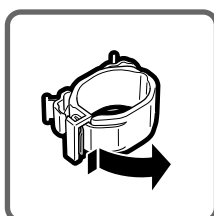
Fix the system cables firmly to the Display as shown.



* If routing the cables on the right side, use the holder on the right. You need to reverse the direction of the holder when routing the cables on the right side.

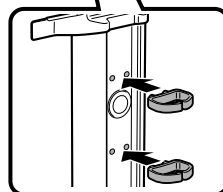
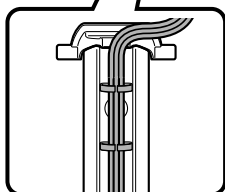
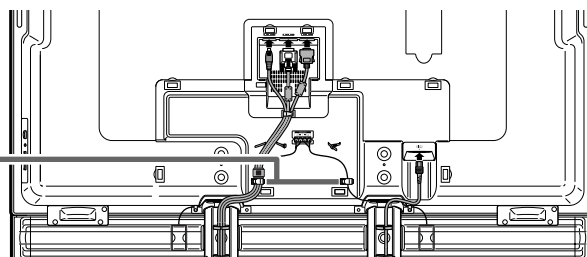


5



Fasten the cables with the holder.

* If routing the cables on the right side, use the holder on the right.

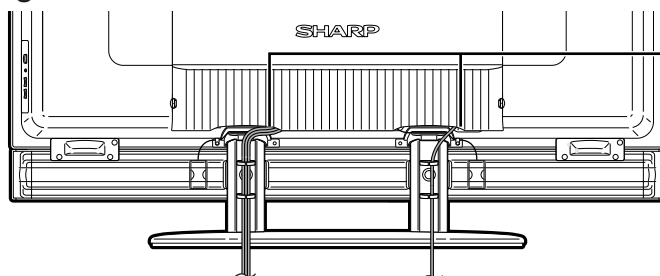


Cable clamp

Insert the cable clamp in the hole on the Display as shown.

6

Closing the terminal cover

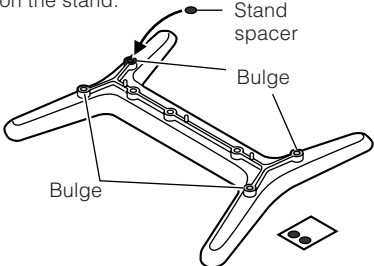
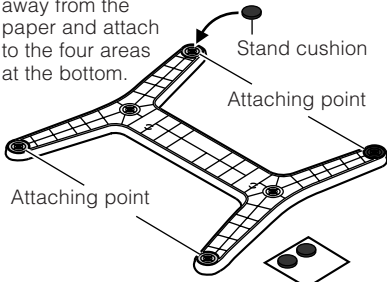
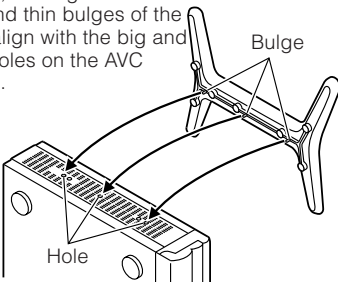
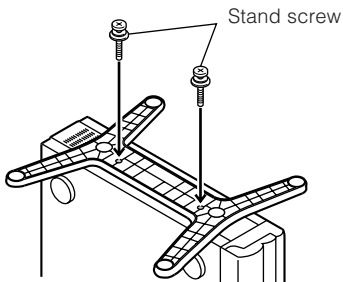
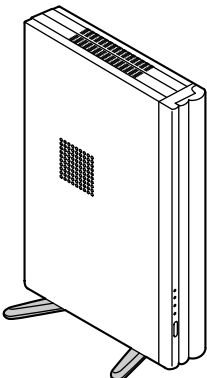


Cables come out from the small opening.

Setting the AVC System with the stand

How to install the AVC System vertically using the stand unit

- Use the supplied stand unit for installing the AVC System vertically in an upright position.

1 Stick each spacer to the stand as shown. Peel each spacer away from the paper and attach to the four bulging areas on the stand. 	2 Attach each cushion to the stand as shown. Peel each cushion away from the paper and attach to the four areas at the bottom. 	3 Fit the stand to the AVC System. Insert the stand into the AVC System, making sure that the thick and thin bulges of the stand align with the big and small holes on the AVC System. 
4 Attach the stand using the stand screws as shown. 	The AVC System installed vertically with the stand. 	

NOTE

- When mounting the AVC System vertically, always use the supplied stand. Be careful not to block vent holes when standing up directly on the floor or a flat surface as this can result in equipment failure.

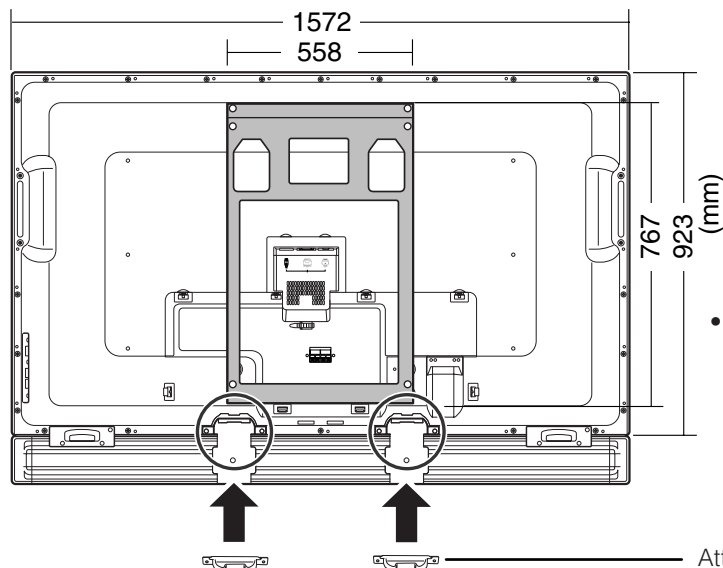
Preparation

Setting the Display on the wall

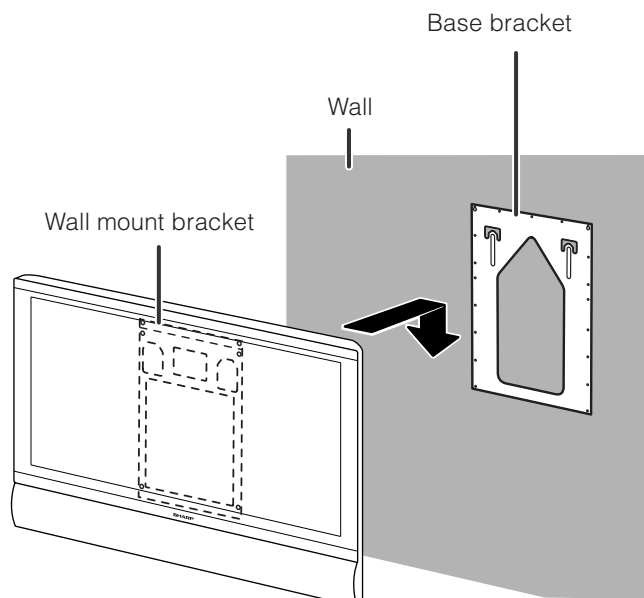
- You can mount the Display on the wall, using the optional AN-65AG1 bracket.
- For details, refer to the instructions supplied with the optional bracket.

CAUTION

- **Installing the Display requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.**



- Be sure to attach the stand hole covers (supplied) after detaching the stand.



Preparation

Removing the stand

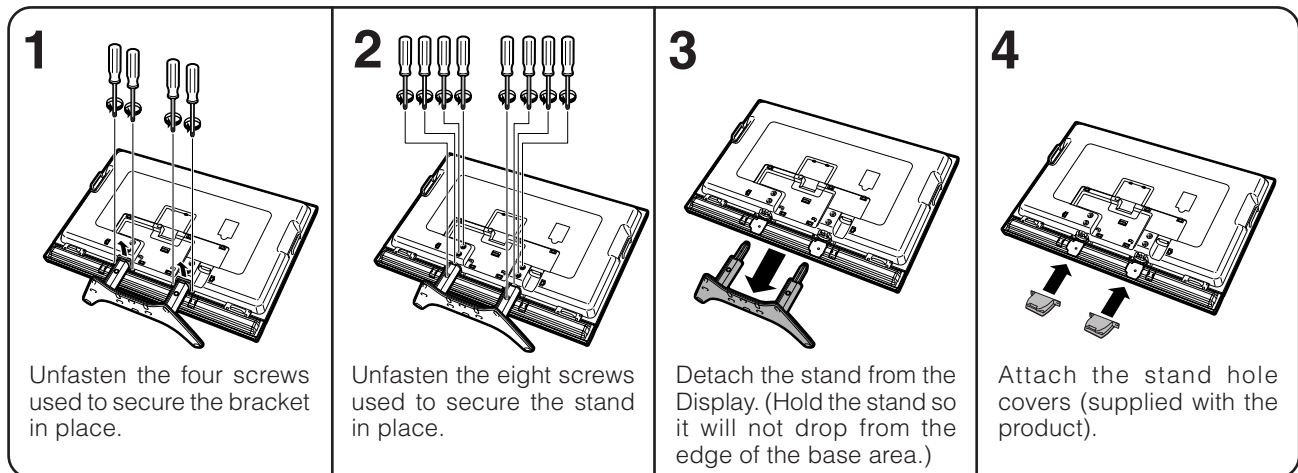
Before detaching (or attaching) stand, unplug the AC cord from the AC input terminal and the system cable from the Display.

CAUTION

- Do not remove the stand and speaker from the Display unless using an optional bracket to mount it.

Before attaching/detaching stand

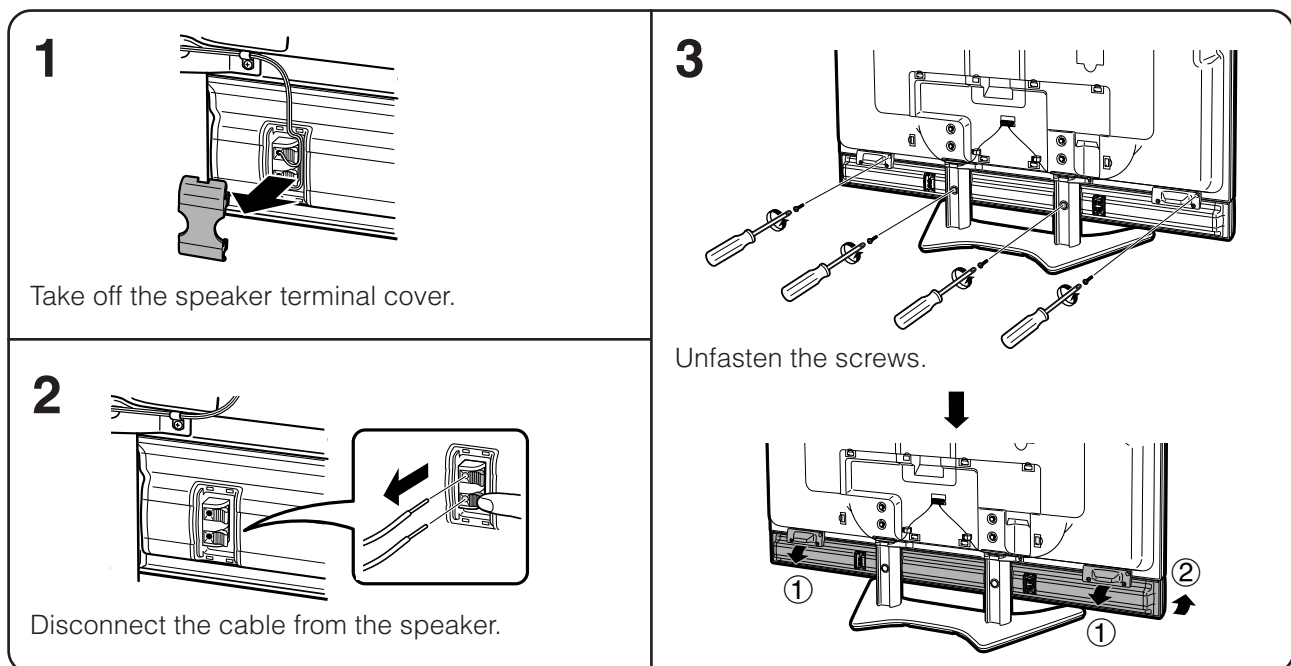
- Before performing work, make sure to turn off the System.
- Before performing work, spread cushioning over the base area to lay the Display on. This will prevent it from being damaged.



NOTE

- To attach the stand, perform the above steps in reverse order.

Removing speakers



CAUTION

- Do not remove the stand and speaker from the Display unless using an optional bracket to mount it.
- Before performing work, spread cushioning over the base area to lay the Display on. This will prevent it from being damaged.

NOTE

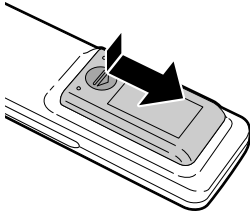
- To attach the speaker, perform the steps in reverse order.
- Perform the same steps for the left section of the speaker.

Preparation

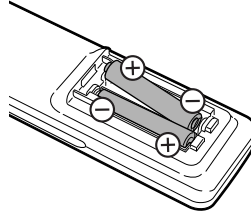
Inserting the batteries

Before using the System for the first time, insert two “AAA” size batteries (supplied). When the batteries become depleted and the remote control fails to operate, replace the batteries with new “AAA” size batteries.

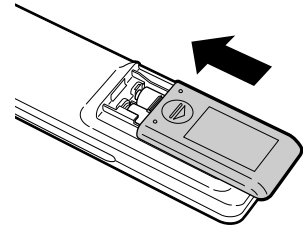
1 Open the battery cover.



2 Insert two supplied “AAA” size batteries.



3 Close the battery cover.



- Place batteries with their terminals corresponding to the (+) and (–) indications in the battery compartment.

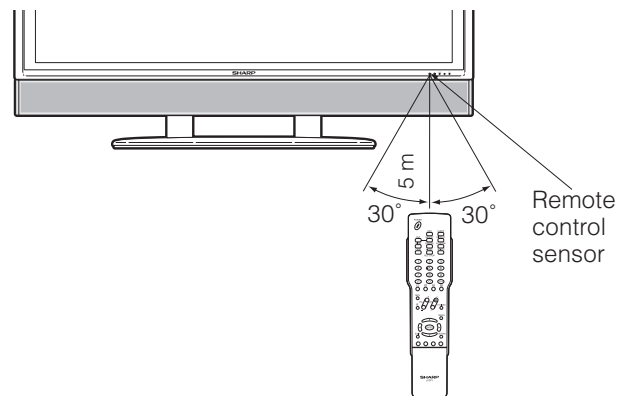
CAUTION

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.

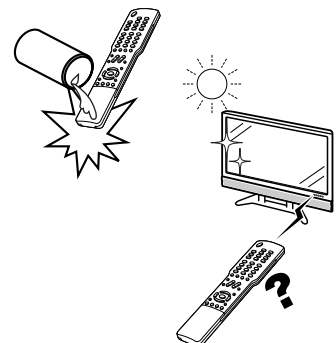
Using the remote control unit

Use the remote control unit by pointing it towards the remote sensor window. Objects between the remote control unit and sensor window may prevent proper operation.



Cautions regarding remote control unit

- Do not expose the remote control unit to shock. In addition, do not expose the remote control unit to liquids, and do not place in an area with high humidity.
- Do not install or place the remote control unit under direct sunlight. The heat may cause deformation of the unit.
- The remote control unit may not work properly if the remote sensor window of the Display is under direct sunlight or strong lighting. In such case, change the angle of the lighting or Display, or operate the remote control unit closer to the remote sensor window.



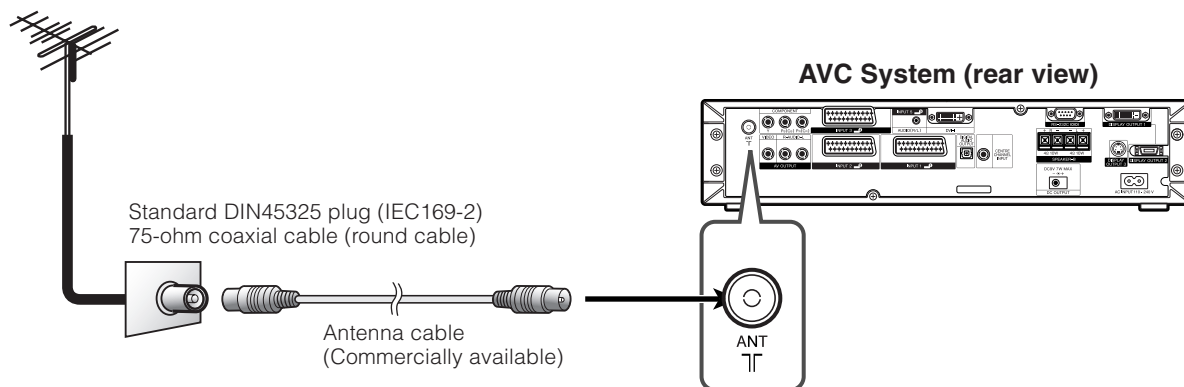
Preparation

Simple operations for watching a TV programme

Basic connection

Connecting to an antenna

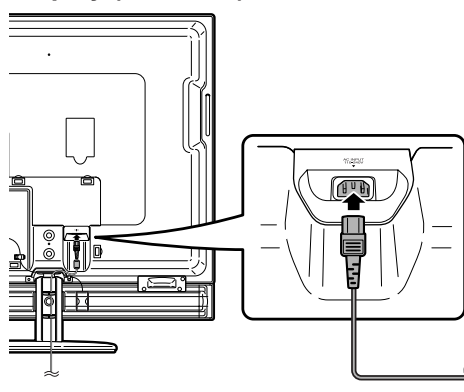
To enjoy a clearer picture, use an outdoor antenna. The following is a brief explanation of the types of connections that are used for coaxial cable.



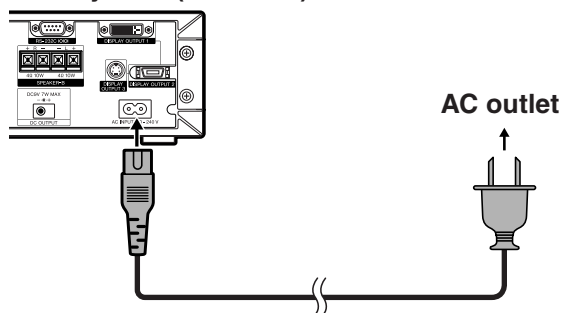
Connecting to the power outlet

Before connecting the AC cords, make sure to connect the system cable first.

Display (rear view)



AVC System (rear view)

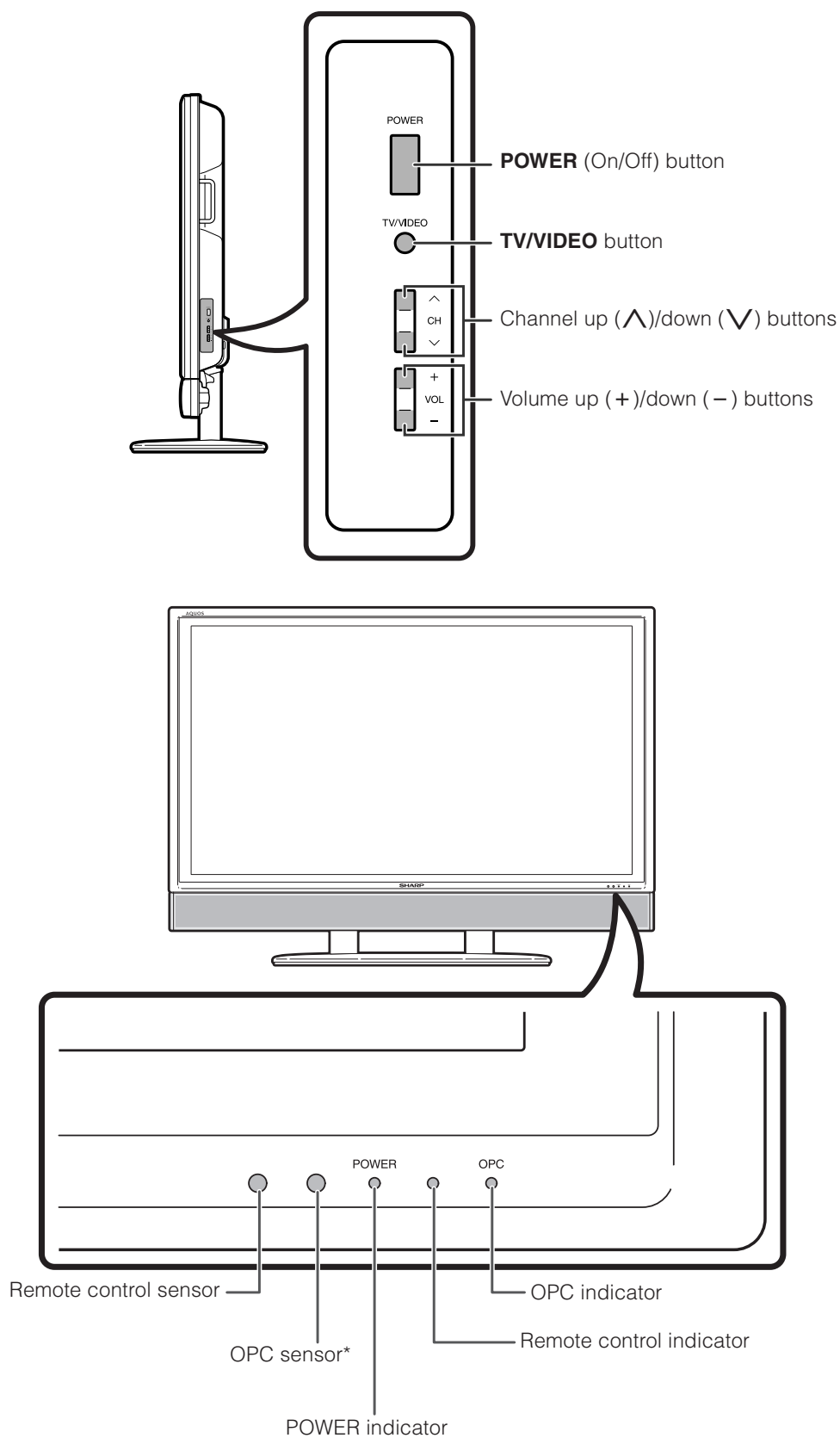


NOTE

- Always turn off the main power of Display when connecting the AC cords.
- Disconnect the AC cords from the AC outlet, Display and AVC System if the System will not be used for a long period of time.

Part names

Display

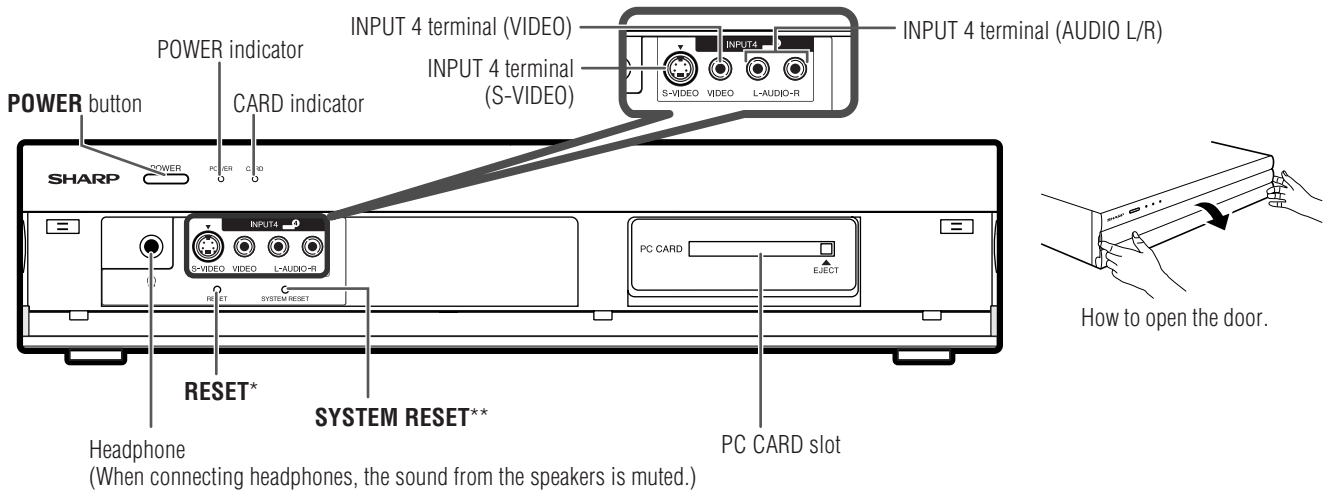


*OPC: Optical Picture Control
(See page 28.)

Part names

AVC System

Front view



* Press **RESET** if the System cannot return to its original state after performing various operations.

This will reset the System as shown below.

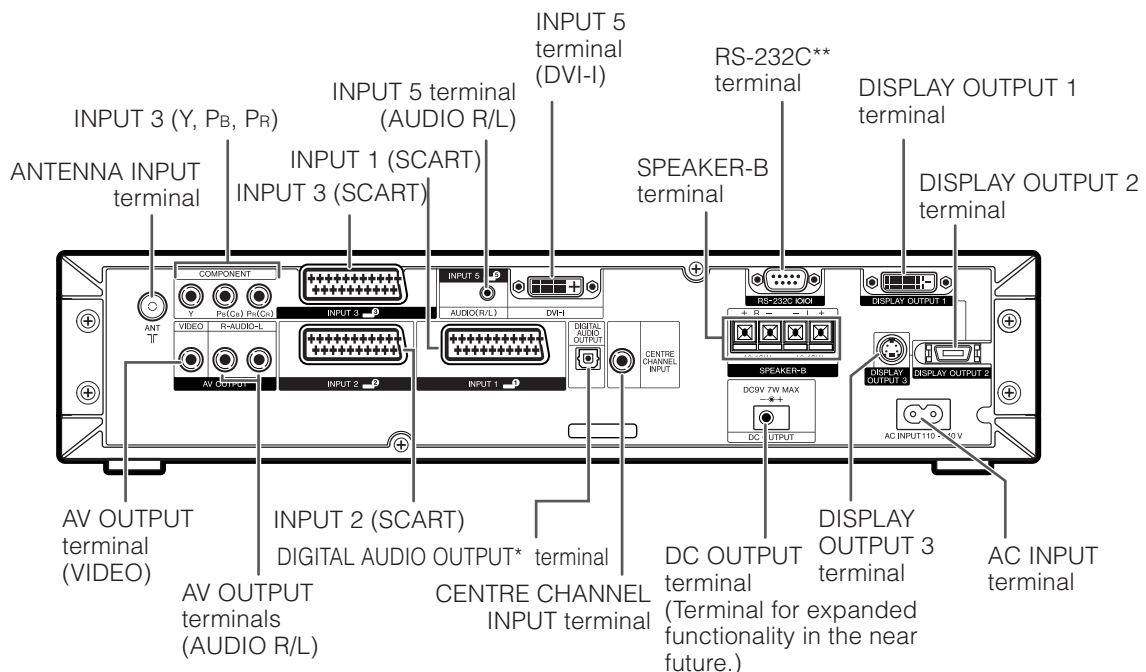
- "AV MODE" resets to "USER".
- TV channel resets to channel 1.
- Dual screen resets to normal.
- Audio setting initialises.
- "Dolby Virtual" resets to "Off".
- Image position is initialised.
- Still image mode deactivates.
- Teletext mode resets to normal.
- "Speaker" setting resets to "SPEAKER-A".
- "Audio Out" setting resets to "Fixed".
- "Centre Channel Input" setting resets to "Off".
- "Audio Only" setting resets to "Off".

** Press **SYSTEM RESET** if the System does not operate after starting up.

NOTE

- Pressing **RESET** will not work if the System is in standby mode (indicator lights red).
- Pressing **RESET** will not delete channel preset and password. See page 56 for resetting the password when you know it. See page 71 for initialising to the factory preset values in case you forget your password.

Rear view



*Connect a digital audio equipment.

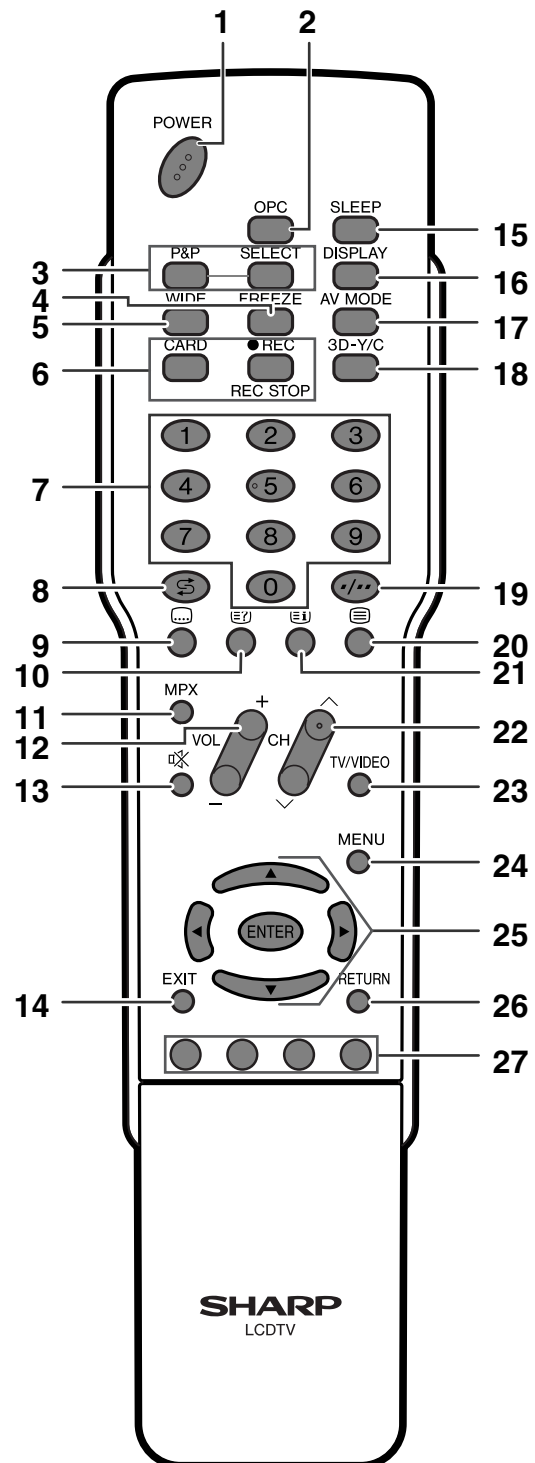
**Provided for command from PC (see pages 64 and 65).

- Use **RCA/SCART conversion connector** to connect with external equipment. Connector without S-video input is for INPUT 1. Connectors with S-video input are for INPUT 2 and 3.

Part names

Remote control unit

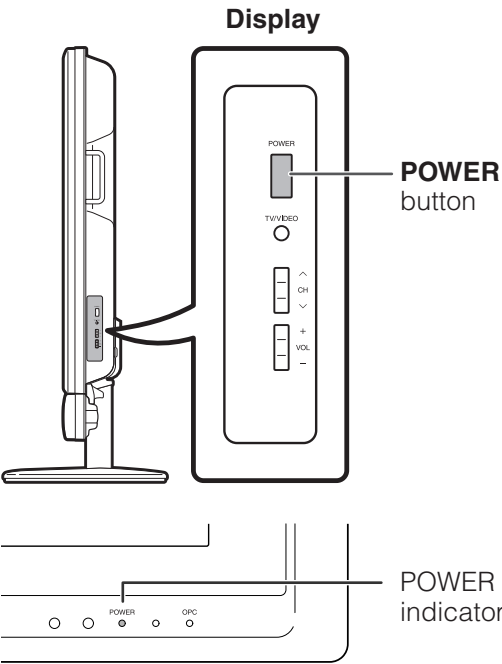
- 1 POWER (STANDBY/ON)**
To switch the power on and off. (See page 17.)
- 2 OPC**
To switch the Optical Picture Control on and off. (See page 28.)
- 3 P&P**
Set the dual picture mode. Press **P&P** again to return to normal view. (See page 58.)
- 4 SELECT**
To select either screen to be active in Dual screen mode.
- 5 FREEZE**
TV/External input mode: Change the still image mode. (See pages 37 and 58.)
TELETEXT mode: Freeze a multi-page on screen while other pages are automatically updated. Press **FREEZE** again to return to the normal image. (See page 60.)
- 6 WIDE**
TV/External input mode: Change the wide image mode. (See pages 52 and 53.)
TELETEXT mode: Set the area of magnification. (full/upper half/lower half) (See page 60.)
- 7 CARD**
Switch to the card mode.
Card mode: Press to turn the Card Control Panel on and off. (See page 36.)
- REC/REC STOP**
Still image: Press to capture a still image to a card after freezing the image from TV or external equipment. (See page 37.)
Motion picture: Press to start/stop recording a motion picture to a card from TV or external equipment. (See page 40.)
- 8 0 - 9**
TV/External input mode: Set the channel. (See page 18.)
TELETEXT mode: Set the page. (See page 60.)
- 9 ⏮ (Flashback)**
Press to return to the previous image in normal viewing mode. (See page 18.)
- 10 📄 (SUBTITLE for TELETEXT)**
TV/External input mode: To turn the subtitles on and off. (See page 61.)
- 11 📄 (Reveal hidden for TELETEXT)**
TELETEXT mode: Display hidden characters. (See page 60.)
- 12 MPX**
Select the sound multiplex mode. (See page 19.)
- 13 VOL + / VOL -**
Set the volume. (See page 20.)
- 14 🔇 (MUTE)**
Mute the sound. (See page 20.)
- 15 EXIT**
Turn off the On Screen Display.
- 16 SLEEP**
Set the Sleep timer. (See page 55.)
- 17 DISPLAY**
Display the programme information.
- 18 AV MODE**
Select a video setting: AV MODE (STANDARD, MOVIE, GAME, USER, DYNAMIC), PC MODE (STANDARD, USER) (See page 51.)
- 19 3D-Y/C**
To switch the 3D-Y/C function on and off. (See page 31.)
- 20 - / - (Digit for channel select)**
Change the digits of the selected TV channel. (See page 18.)
- 21 📄 (TELETEXT)**
Select the TELETEXT mode. (all TV image, all TEXT image, TV/TEXT image) (See pages 60 and 61.)
- 22 📄 (TOP Overview for TELETEXT)**
TELETEXT mode: Display an index page for CEEFAX/FLOF information. TOP Overview for TOP programme. (See page 61.)
- 23 CH / CH V**
TV input mode: Select the channel. (See page 18.)
TELETEXT mode: Select the page. (See page 60.)
- 24 TV/VIDEO (INPUT SOURCE)**
Select an input source. (TV, INPUT 1, INPUT 2, INPUT 3, INPUT 4, INPUT 5, CARD) (See pages 43, 49, 50 and 58.)
- 25 MENU**
Display the menu screen. (See page 21.)
- 26 ▲ / ▼ / ◀ / ▶ (Cursor)**
Select a desired item on the setting screen. (See page 21.)
- 27 ENTER**
Execute a command.
- 28 RETURN**
MENU mode: Return to the previous menu screen. (See page 21.)
- 29 Colour (RED/GREEN/YELLOW/BLUE)**
TELETEXT mode: Select a page. (See page 60.)



NOTE

- When using the remote control unit, point it at the Display.

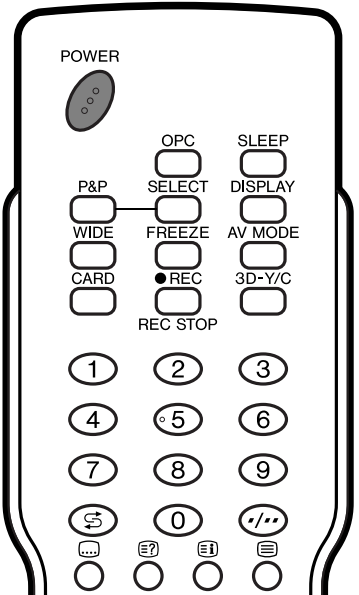
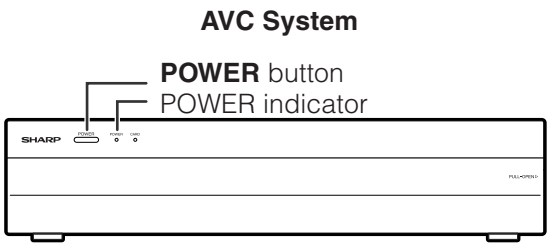
Watching TV



Turning on the power

Before turning on the power make sure you have completed required connections. (See pages 7 and 13.)

- 1 Press **POWER** on the Display.
 - **POWER** indicator (Green): The System is on. (After a few seconds, programme information appears with sound.)
 - **POWER** indicator (Red): The System is in standby. (Go to step 2.)
- 2 Use any of the methods below to power on. Powering on changes the indicator from red to green.
 - Press **POWER** on the AVC System.
 - Press **POWER** on the remote control.



Turning off the power

Press **POWER** on the remote control unit or **POWER** on the Display.

- The System enters standby mode and the image on the screen disappears.
- Both **POWER** indicators change from green to red.

- Press **POWER** on the Display.
- The **POWER** indicator on the Display turns off.
 - When the System is turned off by **POWER** on the Display, you cannot turn on the power by pressing **POWER** on the remote control.

POWER indicator

Off	Power off
Red	The System is in standby mode.
Green	The System is on.

NOTE

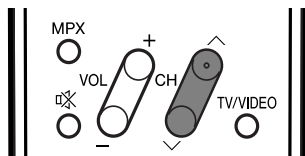
- Check if the system cable is connected properly when display indicator flashes red.
- If you are not going to use this System for a long period of time, be sure to remove the AC cords from the power outlet.
- Minor power is consumed when the unit is in standby mode.

Simple button operations for changing channels

You can change channels in several ways.

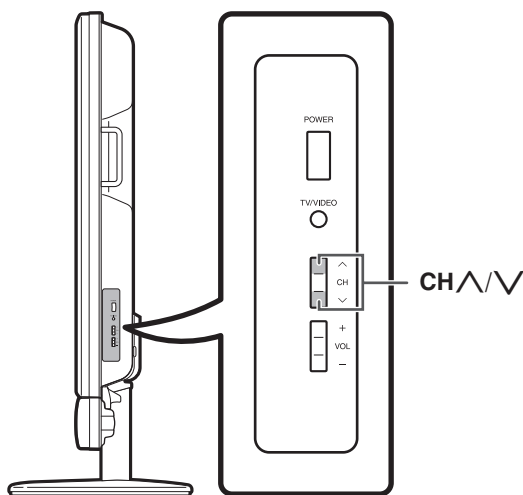
Using CH $\wedge$ / $\vee$ on the remote control unit

- Press **CH $\wedge$** to increase the channel number.
- Press **CH $\vee$** to decrease the channel number.



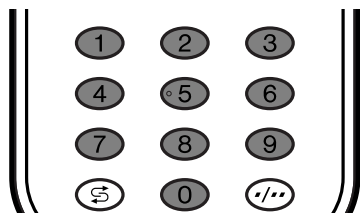
NOTE

- **CH $\wedge$ / $\vee$** on the Display operates the same as **CH $\wedge$ / $\vee$** on the remote control unit.



Using 0 – 9 on the remote control unit

Select the channels directly by pressing buttons **0** to **9**.



EXAMPLE

To select a 1-digit channel (e.g. channel 2):

- Press **2**. If "2" is indicated and the picture does not change immediately, press **//** to switch over to the 1-digit select mode and press **2** again.

To select a 2-digit channel (e.g. channel 12):

- Press **//** to set the 2-digit select mode. Press **1**, followed by **2**.

NOTE

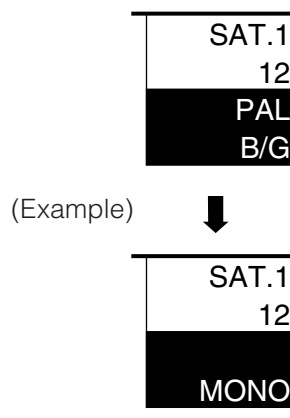
- Complete this procedure within 3 seconds, otherwise the selection will not be made on the 2-digit channel mode.

When viewing Teletext information

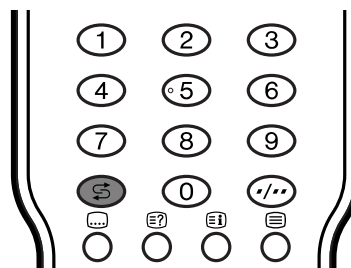
View a page directly which is 3-digit page number from 100 to 899 by pressing buttons **0** to **9**.

Channel display

Channel display changes approximately after 3 seconds as shown below.



Using Flashback (\$) on the remote control unit



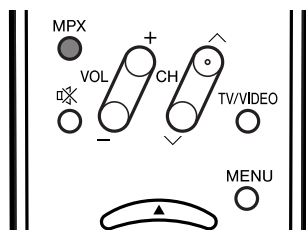
Press **\$** to switch the currently tuned channel to the previously tuned channel.

Press **\$** again to switch back to the currently tuned channel.

Press **\$** to toggle between the currently selected input source and the previously selected one.

Press **\$** to return to the previous page in TELETEXT mode.

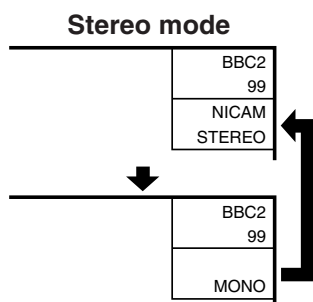
Using MPX on the remote control unit



In the NICAM TV broadcasts

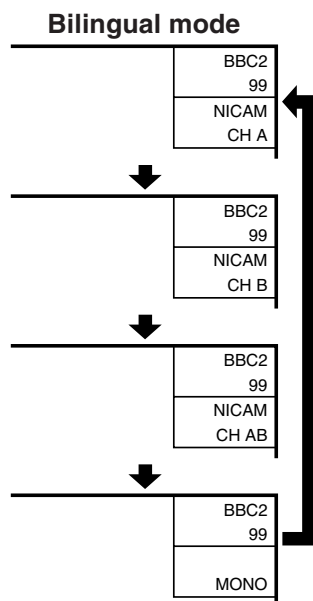
When receiving a stereo signal

Each time you press **MPX**, the mode switches between NICAM STEREO and MONO.



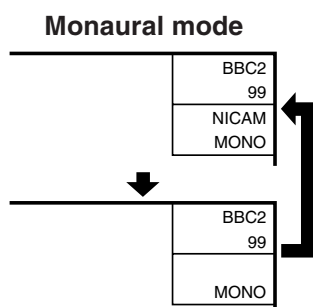
When receiving a bilingual signal

Each time you press **MPX**, the mode switches among NICAM CH A, NICAM CH B, NICAM CH AB and MONO.



When receiving a monaural signal

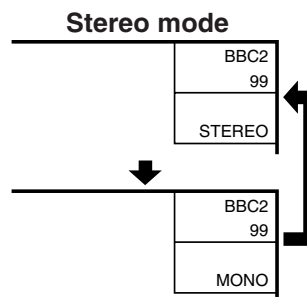
Each time you press **MPX**, the mode switches between NICAM MONO and MONO.



In the TV mode of A2 TV broadcasts

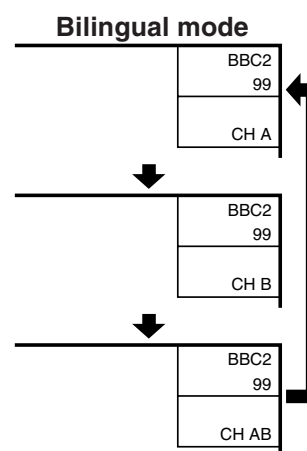
When receiving a stereo signal

Each time you press **MPX**, the mode switches between STEREO and MONO.



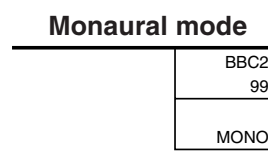
When receiving a bilingual signal

Each time you press **MPX**, the mode switches among CH A, CH B and CH AB.



When receiving a monaural signal

When you press **MPX**, "MONO" displays.



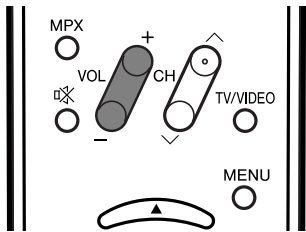
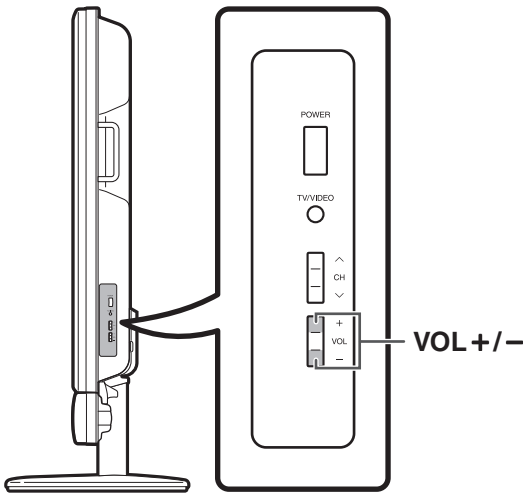
NOTE

- When no signal is input, the sound mode will display "MONO".
- "BBC2" and "99" are tentative network name and channel.

Simple button operation for changing volume/sound

Changing the volume

You can change the volume on the Display or on the remote control unit.



- To increase the volume, press **VOL +**.
- To decrease the volume, press **VOL -**.



NOTE

- “TV”, “INPUT1”, “INPUT2”, “INPUT3”, “INPUT4”, “INPUT5” and “CARD” modes can each store volume adjustment values separately.

When “Audio Out” is set to “Variable”, the indicator on the screen changes as shown below.



Audio status

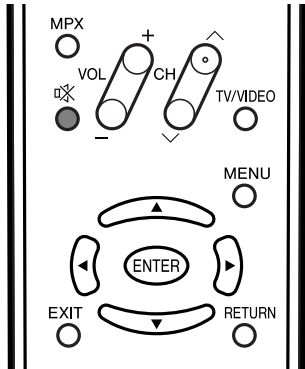
Output device	Audio out	
	Fixed	Variable
Speaker	Variable sound	Mute
AV OUTPUT	Constant as specified	Variable sound

NOTE

- See page 55 for details on the audio out function.

Using (Mute) on the remote control unit

 mutes the current sound output.



1

Press .

- The sound is silenced.
- “” has been displayed on the screen for 30 minutes.

Mute



NOTE

- Within 30 minutes after pressing , press one of the buttons below to cancel the mute.
—VOL +/VOL -
—
- **Mute will be cancelled after 30 minutes. However, the TV will not suddenly output loud sound as the volume level will be set to 0 automatically. Increase the volume level by pressing VOL +.**

2

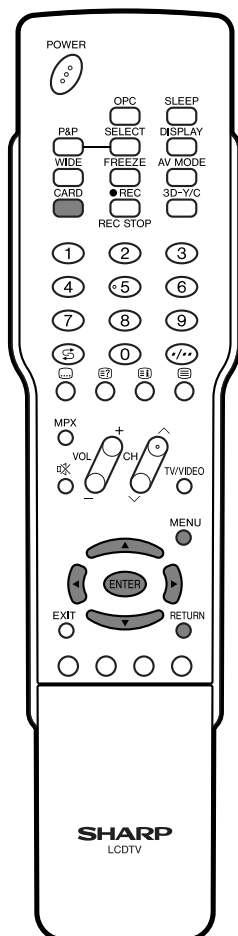
Press  again within 30 minutes to cancel the mute.

- Before 30 minutes, the volume level returns to the previous setting.

Basic adjustment settings

Menu operation buttons

Use the following buttons on the remote control to operate the menu.



MENU: Press to open or close the menu screen.

▲/▼/◀/▶: Press to select a desired item on the screen or adjust a selected item.

ENTER: Press to go to the next step or complete the setting.

RETURN: Press to return to the previous step.

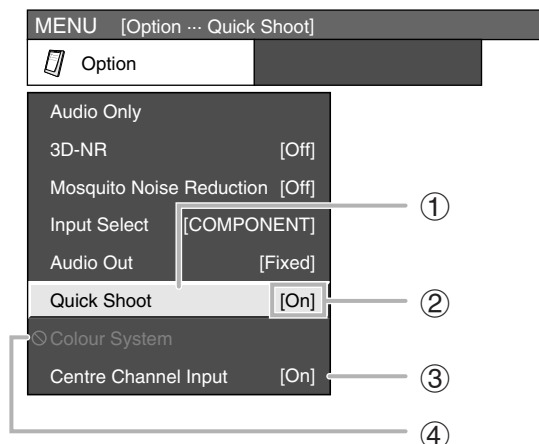
CARD: Press to open or close the Card mode screen.

◀▶: Select ENTER: Enter RETURN: Back MENU: End

The bar above is an operational guide for the remote control. The bar will change in accordance with each menu setting screen.

On-Screen Display

Example



① Item displayed in yellow

- This indicates the item currently selected.
- Press **ENTER** to go to the adjustment screen for this item.

② Item in brackets

- This indicates the current setting for the item.

③ Item displayed in white

- This indicates an item can be selected.

④ Item displayed in grey

- This indicates that the item cannot be selected.

*There are various reasons why items cannot be selected, but the main reasons are as follows:

1. Nothing is connected to the selected input terminal.
2. The function is not compatible with the current input signal.

NOTE

- Menu options vary according to the selected input mode, but the operating procedures are the same.
- The screens in the operation manual are for explanation purposes (some are enlarged, others cropped) and may vary slightly from the actual screens.

TV/AV input mode menu items

List of TV/AV menu items to help you with operations



OPC	Page 28
Backlight	Page 29
Contrast	Page 29
Brightness	Page 29
Colour	Page 29
Tint	Page 29
Sharpness	Page 29
Advanced	
C.M.S.	Page 30
Colour Temp.	Page 30
Sharpness Enhancement	Page 30
Automatic Contrast	Page 30
I/P Setting	Page 31
Film Mode	Page 31
3D-Y/C	Page 31
Monochrome	Page 31



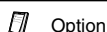
Treble	Page 32
Bass	Page 32
Balance	Page 32
Dolby Virtual	Page 32



No Signal Off	Page 33
No Operation Off	Page 33



Auto Installation	Page 23
Programme Setup	Pages 23-27
Child Lock	Page 56
Input Label	Page 50
Speaker Setup	Page 47
Position	Page 48
WSS	Page 51
4:3 Mode	Page 51
Rotate	Page 54
Language	Page 28
Text Language	Page 59



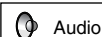
Audio Only	Page 48
3D-NR	Page 54
Mosquito Noise Reduction	Page 55
Input Select	Page 49
Audio Out	Page 55
Quick Shoot	Page 54
Colour System	Page 50
Centre Channel Input	Page 57

PC input mode menu items

List of PC menu items to help you with operations



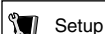
OPC	Page 28
Backlight	Page 29
Contrast	Page 29
Brightness	Page 29
Red	Page 29
Green	Page 29
Blue	Page 29
Advanced	
C.M.S.	Page 30
Sharpness Enhancement	Page 30



Treble	Page 32
Bass	Page 32
Balance	Page 32
Dolby Virtual	Page 32



Power Management	Page 33
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Input Label	Page 50
Speaker Setup	Page 47
Input Signal	Page 54
Auto Sync.	Page 48
Fine Sync.	Page 49
Rotate	Page 54
Language	Page 28

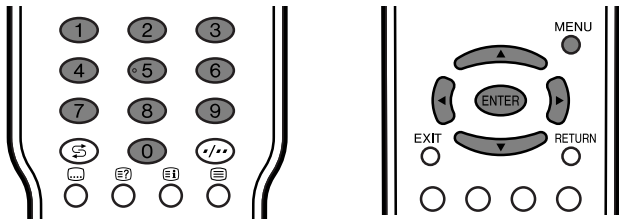


Audio Only	Page 48
Input Select	Page 49
Audio Out	Page 55
Quick Shoot	Page 54
Centre Channel Input	Page 57

Basic adjustment settings

Auto installation

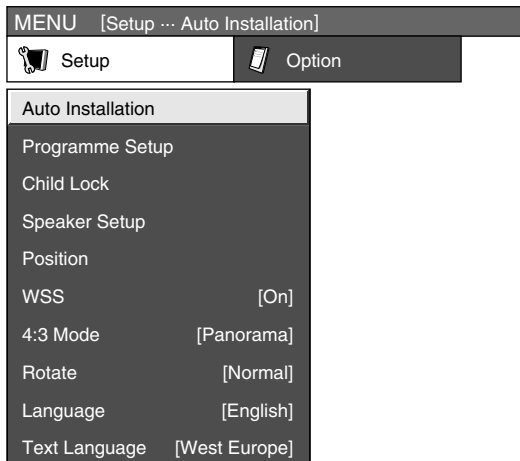
You can run auto installation again, even after setting up the preset channels.



1 Press **MENU** and the MENU screen displays.

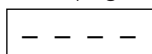
2 Press **◀/▶** to select “Setup”.

3 Press **▲/▼** to select “Auto Installation”, and then press **ENTER**.



4 If you have already set the password, enter it here.

- See page 56 for setting password.



5 Press **◀/▶** to select “Yes”, and then press **ENTER**.

6 Press **▲/▼** to select the desired language listed on the screen, and then press **ENTER**. After this setting, auto search starts with the following order.

- ① Programme auto search
- ② Auto labelling
- ③ Auto sorting

You do not need to do anything during the auto search.

NOTE

- After performing step 6, the menu screen shown in step 3 will reappear. Do not turn off the System before then, because the System is saving the data found.

Programme setup

You can run the auto search procedure again at any time by accessing the Setup menu and Programme Setup. Channels can be tuned automatically or manually.

Auto search

You can also automatically search by performing the procedure below. This is the same function as programme auto search in auto installation.

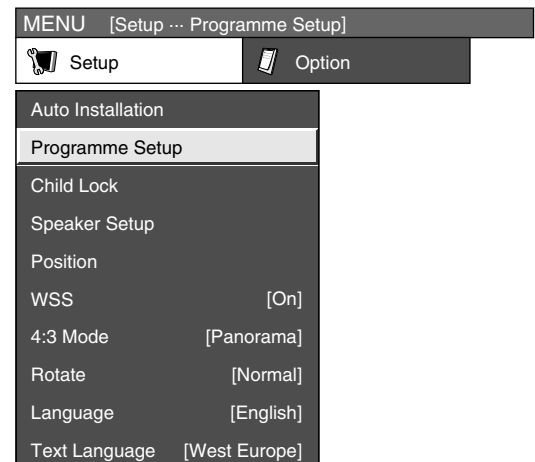
1 Press **MENU** and the MENU screen displays.

2 Press **◀/▶** to select “Setup”.

3 Press **▲/▼** to select “Programme Setup”, and then press **ENTER**.

If you have already set the password, enter it here.

- See page 56 for setting password.



4 Press **▲/▼** to select “Auto Search”, and then press **ENTER**.

5 Press **◀/▶** to select “Yes”, and then press **ENTER**.

- Auto search starts with the following order.
 - ① Programme auto search
 - ② Auto labelling
 - ③ Auto sorting

NOTE

- After performing step 5, the menu screen shown in step 3 will reappear. Do not turn off the System before then, because the System is saving the data found.

Basic adjustment settings

Manual setting for each channel

You can set some channel items manually. They are Search, Fine (TV frequency), Colour sys., Sound sys., Label (Network name), Skip, Lock (Child Lock) and Booster.

1 Press **MENU** and the MENU screen displays.

2 Press **◀/▶** to select "Setup".

3 Press **▲/▼** to select "Programme Setup", and then press **ENTER**.
If you have already set the password, enter it here.
• See page 56 for setting password.

4 Press **▲/▼** to select "Manual Adjust", and then press **ENTER**.

5 Press **◀/▶** to select "Yes", and then press **ENTER**.

Programme Setup "Manual Adjust" menu

01 SAT.1	02 PR07	03 KABEL		

Next

You can select one of the following settings.

- ① Search (See page 24.)
- ② Fine (See page 24.)
- ③ Colour system (See page 25.)
- ④ Sound system (See page 25.)
- ⑤ Label (See page 25.)
- ⑥ Skip (See page 26.)
- ⑦ Lock (See page 26.)
- ⑧ Booster (See page 26.)

Search tuning

1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.
• The selected channel information displays.

2 Press **▲/▼** to select "Search", and then press **ENTER**.

MENU [Setup ... Programme Setup ... Manual Adjust]

Search	
Fine	[179.25]
Colour sys.	[AUTO] 179.25 MHz
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Lock	[Off]
Booster	[Off]

NEXT
STORE
CANCEL

3 Press **▲/▼** to select item and press **ENTER**.
• **NEXT**: Search the next channel.
• **STORE**: Memorise the current display channel.
• **CANCEL**: Return to the previous screen. (The search result will not be stored.)

NOTE

- Search tuning cannot be used when L' is selected in Sound system menu. (See page 25.)

Fine tuning

1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.
• The selected channel information displays.

2 Press **▲/▼** to select "Fine", and then press **ENTER**.

3 Press **◀/▶** to adjust the frequency, and then press **ENTER**.
• Adjust while checking the background picture as a reference.

Search	
Fine	[179.25]
Colour sys.	[AUTO] 179.25 MHz
Sound sys.	[B/G]
Label	[SAT.1]
Skip	[Off]
Lock	[Off]
Booster	[Off]

- Instead of the method above, you can also set by directly entering the frequency number of the channel with **0 – 9**.

EXAMPLE

- 179.25 MHz: Press **1 → 7 → 9 → 2 → 5**.
- 49.25 MHz: Press **4 → 9 → 2 → 5 → ENTER**.

Basic adjustment settings

Manual setting for each channel (continued)

Colour system

1

Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.

- The selected channel information displays.

2

Press **▲/▼** to select "Colour sys.", and then press **ENTER**.

- Receivable colour systems are listed.

Colour system menu

MENU [Setup --- Programme Setup --- Manual Adjust]		
Search		
Fine	[179.25]	
Colour sys.	[AUTO]	
Sound sys.	[B/G]	
Label	[SAT.1]	
Skip	[Off]	
Lock	[Off]	
Booster	[Off]	

AUTO
PAL
SECAM
NTSC 4.43
PAL-60

3

Press **▲/▼** to select the optimum colour system, and then press **ENTER**.

Sound system (Broadcasting system)

1

Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.

- The selected channel information displays.

2

Press **▲/▼** to select "Sound sys.", and then press **ENTER**.

- Receivable sound systems (Broadcasting systems) are listed.

Sound system menu

Search		
Fine	[179.25]	
Colour sys.	[AUTO]	
Sound sys.	[B/G]	
Label	[SAT.1]	
Skip	[Off]	
Lock	[Off]	
Booster	[Off]	

B/G
D/K
I
L
L'

3

Press **▲/▼** to select the optimum sound system, and then press **ENTER**.

NOTE

- Check the colour system (see above) if the sound output were not correct.

Labelling channels

When a TV channel sends its Network Name, the auto installation detects the information and assigns a name to it. However, you can change individual channel names.

1

Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.

- The selected channel information displays.

2

Press **▲/▼** to select "Label", and then press **ENTER**.

- Alphabets and numbers are listed.

Labelling menu

Search		
Fine	[179.25]	
Colour sys.	[AUTO]	
Sound sys.	[B/G]	
Label	[SAT.1]	
Skip	[Off]	
Lock	[Off]	
Booster	[Off]	

A	B	C	D	E	F	G	H	I	J	CLEAR
K	L	M	N	O	P	Q	R	S	T	BACK
U	V	W	X	Y	Z	+	-	.	_	
0	1	2	3	4	5	6	7	8	9	END

3

Press **▲/▼/◀/▶** to select each character of the new name for the channel, and then press **ENTER**.

4

Repeat until the name is fully spelt out.

- The name can be 5 characters or less.

Basic adjustment settings

Manual setting for each channel (continued)

Skipping channels

Channels with “Skip” set to “On” are passed over when using **CH** even if selected while watching the image from the TV.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.
 - The selected channel information will be displayed.

- 2 Press **▲/▼** to select “Skip”, and then press **ENTER**.
 - Skip menu displays.

Skip menu

MENU [Setup --- Programme Setup --- Manual Adjust]		
Search		
Fine	[179.25]	Off
Colour sys.	[AUTO]	
Sound sys.	[B/G]	On
Label	[SAT.1]	
Skip	[Off]	
Lock	[Off]	
Booster	[Off]	

- 3 Press **▲/▼** to set “Skip” to “On”, and then press **ENTER**.

Setting the child lock

You can block the viewing of any channel.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.
 - The selected channel information will be displayed.

- 2 Press **▲/▼** to select “Lock”, and then press **ENTER**.
 - Child lock menu will be displayed.

Lock menu

Search		
Fine	[179.25]	Off
Colour sys.	[AUTO]	
Sound sys.	[B/G]	On
Label	[SAT.1]	
Skip	[Off]	
Lock	[Off]	
Booster	[Off]	

- 3 Press **▲/▼** to set “Lock” to “On”, and then press **ENTER**.

NOTE

- See page 56 for setting password.
- When “Lock” is set to “On” for a channel, “Child lock has been activated.” is displayed, and the image and sound of the channel is blocked.
- When pressing **ENTER** while “Child lock has been activated.” is displayed, password input menu will be displayed. Inputting the correct password lifts the child lock temporarily until the power is turned off.

Setting the booster

Picture quality may improve in regions with weak signal strength using this function.

- 1 Press **▲/▼/◀/▶** to select the channel you want to edit, and then press **ENTER**.

- 2 Press **▲/▼** to select “Booster”, and then press **ENTER**.
 - Booster menu displays.

Booster Menu

Search		
Fine	[179.25]	Off
Colour sys.	[AUTO]	
Sound sys.	[B/G]	On
Label	[SAT.1]	
Skip	[Off]	
Lock	[Off]	
Booster	[Off]	

- 3 Press **▲/▼** to set “Booster” to “On”, and then press **ENTER**.

NOTE

- If signal strength is strong enough for the selected channel, the effect is negligible and may produce instability. In such case, select “Off”.

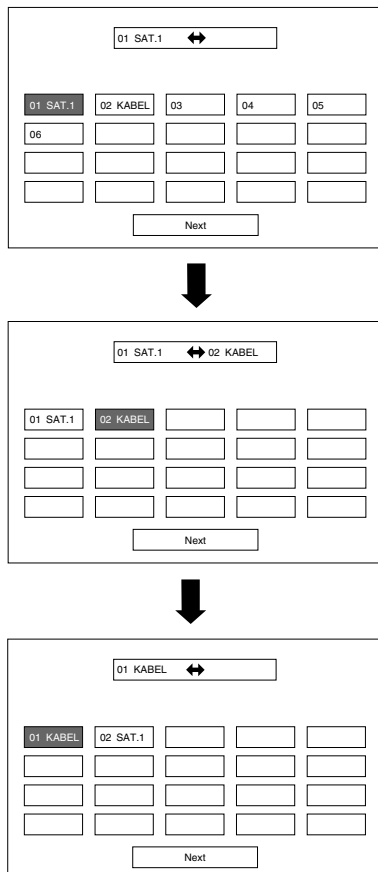
Basic adjustment settings

Sort

Channel positions can be sorted freely.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "Setup".
- 3 Press **▲/▼** to select "Programme Setup", and then press **ENTER**.
If you have already set the password, enter it here.
• See page 56 for setting password.
- 4 Press **▲/▼** to select "Sort", and then press **ENTER**.
- 5 Press **◀/▶** to select "Yes", and then press **ENTER**.
- 6 Press **▲/▼/◀/▶** to select the channel you want to move, and then press **ENTER**.
- 7 Move it to the desired position by pressing **▲/▼/◀/▶**, and then press **ENTER**.
- 8 Repeat the steps 6 and 7 until all desired channels are sorted.

Sort menus

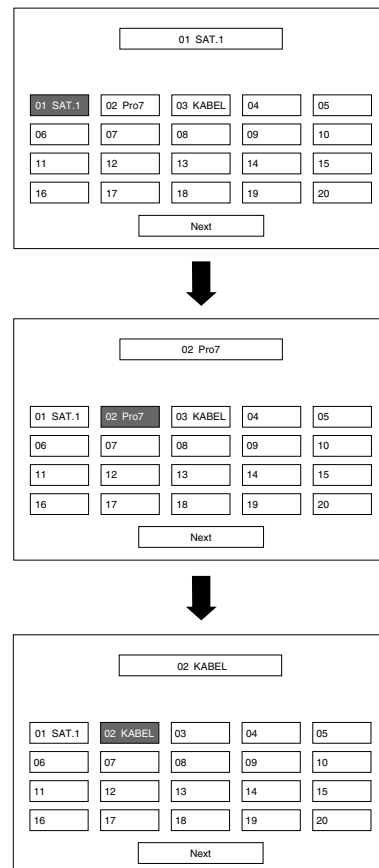


Erase Programme

The individual programme can be erased.

- 1 Repeat steps 1 to 3 in **Sort**.
- 2 Press **▲/▼** to select "Erase Programme", and then press **ENTER**.
- 3 Press **◀/▶** to select "Yes", and then press **ENTER**.
- 4 Press **▲/▼/◀/▶** to select the channel you want to erase, and then press **ENTER**.
• A message screen pops up.
- 5 Press **◀/▶** to select "Yes", and then press **ENTER** to erase the selected programme. All the subsequent programmes move up.
- 6 Repeat the steps 4 and 5 until all desired channels are erased.

Erase programme menus



Basic adjustment settings

Language setting for on-screen display

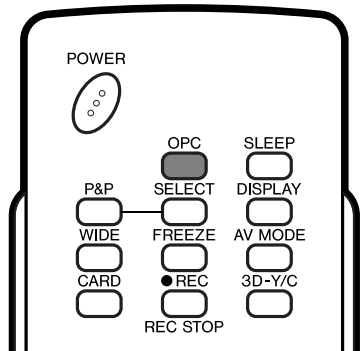
You can also select a language from setup menu. Select from among 3 languages: English, Chinese and Arabic.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀▶ to select "Setup".
- 3 Press ▲▼ to select "Language", and then press **ENTER**.
- 4 Press ▲▼ to select the desired language listed on the screen, and then press **ENTER**.

OPC (Optical Picture Control) setting

You can set the System to automatically adjust the screen to suitable backlight brightness according to the lighting conditions.

Using OPC on the remote control unit



Press **OPC** to switch the Optical Picture Control on and off.

Selected item	Description
Off	The brightness is fixed at the value set in "Backlight" (see page 29).
On	Automatically adjusts

Using OPC on the menu screen

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀▶ to select "Picture".
- 3 Press ▲▼ to select "OPC".
- 4 Press ◀▶ to select "On".

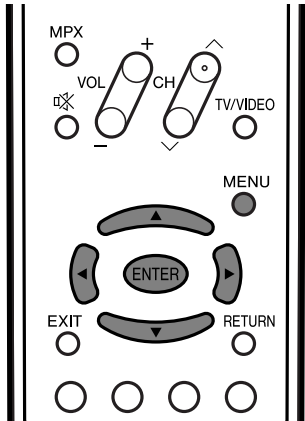
NOTE

- When set to "On", the System senses the surrounding light and automatically adjusts the backlight brightness. Make sure no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.

Basic adjustment settings

Picture adjustments

You can adjust the picture to your preference.
Follow the steps to adjust the picture.



- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “Picture”.
- 3 Press **▲/▼** to select a specific adjustment item.
- 4 Press **◀/▶** to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to factory preset values, press **▲/▼** to select “Reset”, press **ENTER**, press **◀/▶** to select “Yes”, and then press **ENTER**.

Adjustments items for AV source

MENU [Picture]

Picture Audio

USER [TV]

OPC ☐ Off ☐ On

Backlight [+16] -16 +16

Contrast [+30] 0 +40

Brightness [0] -30 +30

Colour [0] -30 +30

Tint [0] -30 +30

Sharpness [0] -10 +10

Advanced

Reset

Selected item	◀button	▶button
Backlight	The screen dims	The screen brightens
Contrast	For less contrast	For more contrast
Brightness	For less brightness	For more brightness
Colour	For less colour intensity	For more colour intensity
Tint	Skin tones become purplish	Skin tones become greenish
Sharpness	For less sharpness	For more sharpness

NOTE

- Select “Advanced” and then press **ENTER** to set “C.M.S-Hue”, “C.M.S-Saturation”, “C.M.S-Value”, “Colour Temp.”, “Sharpness Enhancement”, “Automatic Contrast”, “I/P Setting”, “Film Mode”, “3D-Y/C” or “Monochrome”. See pages 30 and 31.

Adjustments items for PC source

MENU [Picture]

Picture Audio

USER [PC]

OPC ☐ Off ☐ On

Backlight [+16] -16 +16

Contrast [+30] 0 +40

Brightness [0] -30 +30

Red [0] -30 +30

Green [0] -30 +30

Blue [0] -30 +30

Advanced

Reset

Selected item	◀button	▶button
Backlight	The screen dims	The screen brightens
Contrast	For less contrast	For more contrast
Brightness	For less brightness	For more brightness
Red	For weaker red	For stronger red
Green	For weaker green	For stronger green
Blue	For weaker blue	For stronger blue

NOTE

- Select “Advanced” and then press **ENTER** to set “C.M.S-Hue”, “C.M.S-Saturation”, “C.M.S-Value” or “Sharpness Enhancement”.

Basic adjustment settings

Advanced

Advanced setting enables you to set the picture adjustment in more detail. There are eight options you can choose from.

C.M.S. (Colour Management System)

Colour tone is managed using the six-colour adjustment setting.

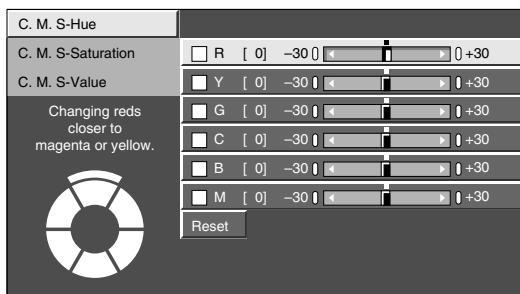
1 Press **MENU** and the MENU screen displays.

2 Press **◀/▶** to select “Picture”.

3 Press **▲/▼** to select “Advanced”, and then press **ENTER**.

4 Press **▲/▼** to select “C.M.S.-Hue”, and then press **ENTER**.

5 Press **▲/▼** to select a specific adjustment item.



- You can select “C.M.S.-Saturation” or “C.M.S.-Value” here instead of selecting “C.M.S.-Hue”.

6 Press **◀/▶** to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to factory preset values, press **▲/▼** to select “Reset”, press **ENTER**, press **◀/▶** to select “Yes”, and then press **ENTER**.

Selected item	Description
C.M.S.-Hue	This is a standard to adjust the colour either more reddish or more bluish in tone.
C.M.S.-Saturation	Increases or decreases the saturation of a selected colour
C.M.S.-Value	A higher value makes the image brighter. A lower value makes the image darker.

Colour temperature

Adjusts the colour temperature to give the best white image.

1 Repeat steps 1 to 3 in **C.M.S. (Colour Management System)**.

2 Press **▲/▼** to select “Colour Temp.”, and then press **ENTER**.

3 Press **▲/▼** to select the desired level, and then press **ENTER**.

Selected item	Description
High	White with bluish tone ↑↓ White with reddish tone
Mid-High	
Middle	
Mid-Low	
Low	

Sharpness Enhancement

Provides sharper images with more depth by adjusting background sharpness.

1 Repeat steps 1 to 3 in **C.M.S. (Colour Management System)**.

2 Press **▲/▼** to select “Sharpness Enhancement”, and then press **ENTER**.

3 Press **◀/▶** to select the desired level, and then press **ENTER**.

- The higher the number of the level, the more sharpness and depth you will get in images.

Automatic Contrast

Adjusts black level and white level in images automatically as appropriate to a particular scene.

1 Repeat steps 1 to 3 in **C.M.S. (Colour Management System)**.

2 Press **▲/▼** to select “Automatic Contrast”, and then press **ENTER**.

3 Press **◀/▶** to select “On” or “Off”, and then press **ENTER**.

Selected item	Description
On	Automatically adjusts
Off	For normal images

Basic adjustment settings

I/P setting

Adjusting the image and input signal can give you a more beautiful picture.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select "Picture".
- 3 Press **▲/▼** to select "Advanced", and then press **ENTER**.
- 4 Press **▲/▼** to select "I/P Setting", and then press **ENTER**.
 - Some items may be greyed out. They are not selectable.
- 5 Press **◀/▶** to select "Fast" or "Slow", and then press **ENTER**.

NOTE

- The I/P Setting is set to Slow when Film Mode is "On".

Film mode

Automatically detects a film-based source (originally encoded at 24/25 frames/second, depending on the vertical frequency), analyses it then recreates each still film frame for high-definition picture quality.

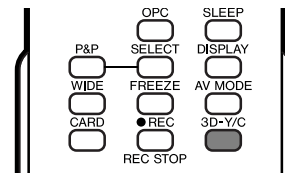
- 1 Repeat steps 1 to 3 in **I/P setting**.
- 2 Press **▲/▼** to select "Film Mode", and then press **ENTER**.
 - Some items may be greyed out. They are not selectable.
- 3 Press **◀/▶** to select "On", and then press **ENTER**.

Selected item	Description
Off	Normal viewing mode
On	Detects, analyses, converts film source

3D-Y/C

Provides high quality images with minimal dot crawl and cross colour noise.

Using 3D-Y/C on the remote control unit



Press **3D-Y/C** to switch the 3D-Y/C function on and off.

NOTE

- "3D-Y/C" is set to "On" when the System is turned back on.
- 3D-Y/C may not operate depending on the input signal type or noisy input signal.
- 3D-Y/C is automatically set to "On" when you change channels or input sources.

- 1 Repeat steps 1 to 3 in **I/P setting**.
- 2 Press **▲/▼** to select "3D-Y/C", and then press **ENTER**.
- 3 Press **▲/▼** to select the desired level, and then press **ENTER**.

Selected item	Description
Standard	Normal adjustment
Fast	For movie image
Slow	For still image

NOTE

- "3D-Y/C" is not selectable depending on the input signal type.

Monochrome

For viewing a video in monochrome.

- 1 Repeat steps 1 to 3 in **I/P setting**.
- 2 Press **▲/▼** to select "Monochrome", and then press **ENTER**.
- 3 Press **◀/▶** to select "On", and then press **ENTER**.

Selected item	Description
Off	Normal colour
On	For viewing in monochrome

Basic adjustment settings

Audio adjustment

You can adjust the sound quality to your preference with the following settings.

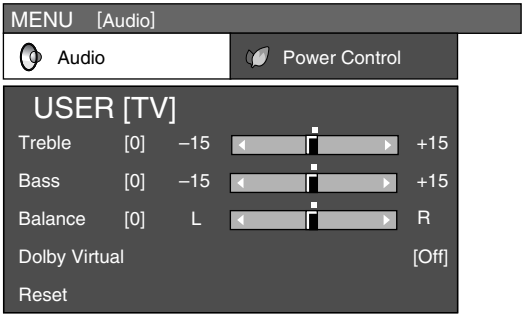
- 1

Press **MENU** and the MENU screen displays.
- 2

Press ◀▶ to select "Audio".
- 3

Press ▲▼ to select a specific adjustment item.
- 4

Press ◀▶ to adjust the item to your desired position.



Selected item	◀button	▶button
Treble	For weaker treble	For stronger treble
Bass	For weaker bass	For stronger bass
Balance	Decrease audio from the right speaker	Decrease audio from the left speaker

- NOTE**
- For resetting all adjustment items to factory preset values, press ▲▼ to select "Reset", press **ENTER**, press ◀▶ to select "Yes", and then press **ENTER**.
 - Audio menu items are greyed out when Audio output is variable or when headphones are in use.
 - Balance is greyed out when Dolby Virtual is set to "On".

Dolby Virtual

When you set Dolby Virtual to On, you can enjoy virtual surround sound, the same as if you were in a movie theatre.

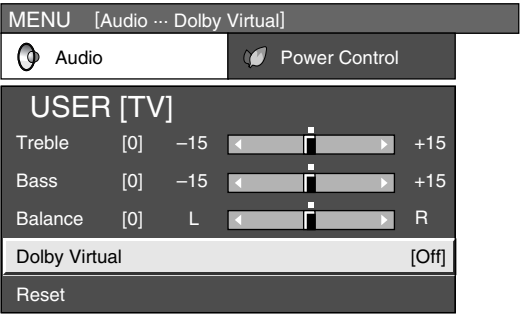
- 1

Press **MENU** and the MENU screen displays.
- 2

Press ◀▶ to select "Audio".
- 3

Press ▲▼ to select "Dolby Virtual", and then press **ENTER**.
- 4

Press ◀▶ to select "On", and then press **ENTER**.



- NOTE**
- Audio menu items are greyed out when Audio output is variable or when headphones are in use.
 - External Audio Bypass is greyed out when Dolby Virtual is set to "On".
 - Balance is greyed out when Dolby Virtual is set to "On".
 - For some discs, setup may be required on your DVD. In this case, refer to the operation manual of your DVD player.
 - You may not get the Dolby Virtual Surround effect if you adjust "Treble" or "Bass" setting.

Basic adjustment settings

Power control

Power control setting allows you to save energy.

Power control for AV source

No Signal off

When set to “Enable”, the power will automatically shut down if no signal inputs for 15 minutes.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select “Power control”.
 - Power control menu displays.
- 3 Press ▲/▼ to select “No Signal Off”, and then press **ENTER**.
- 4 Press ◀/▶ to select “Enable”, and then press **ENTER**
 - Five minutes before the power shuts down, remaining time displays every minute.

NOTE

- “Disable” is factory preset value.
- When a TV programme finishes, and the AVC System receives signal input, this function may not operate.

No Operation off

When set to “Enable”, the power will automatically shut down if there is no operation for 3 hours.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select “Power control”.
 - Power control menu displays.
- 3 Press ▲/▼ to select “No Operation Off”, and then press **ENTER**.
- 4 Press ◀/▶ to select “Enable”, and then press **ENTER**.
 - Five minutes before the power shuts down, remaining time displays every minute.

NOTE

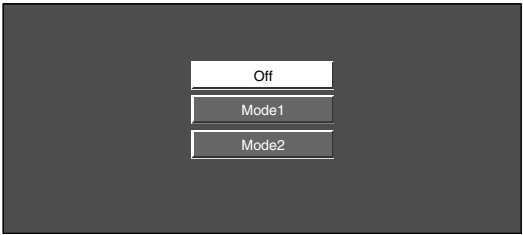
- “Disable” is factory preset value.

Power control for PC source

Power management

When set, the power will automatically shut down if no signal is input for a certain time.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀/▶ to select “Power control”.
 - Power control menu displays.
- 3 Press ▲/▼ to select “Power Management”, and then press **ENTER**.
- 4 Press ▲/▼ to select “Mode1” or “Mode2”, and then press **ENTER**.



Selected item	Description
Off	• No power management • Factory preset value.
Mode1	• If no signal inputs for 8 minutes, the power shuts down. • Even if you start using the PC and the signal inputs again, the System stays off. • The System turns on again by pressing POWER. (See page 17.)
Mode2	• If no signal inputs for 8 seconds, the power shuts down. • When you start using the PC and the signal inputs again, the System turns on. • The System turns on again by pressing POWER. (See page 17.)

NOTE

- If you turn off the power by disconnecting AC cord when setting “Mode2” in power management, the TV may not function properly after turning the power on again. In such case, press **POWER** on the remote control unit.
- Pressing **POWER** on the display will have the same result.
- When selecting “PC digital” in Input Select and setting “Mode 2” in power management, depending on the model of the computer, the power may not turn back on automatically even if the signal inputs again.

Using memory card

Important notes on using memory cards

- SHARP cannot be held responsible for misuse of the LCD TV set, any troubles during use, or other problems, or any damages arising out of the use of the LCD TV set, except for those cases for which SHARP is liable by law.
- If you or other people misuse the LCD TV set, or the LCD TV set is affected by static electricity or electrical noise, the recorded data may be in danger of being changed or lost.
- If you are making an important recording, run a test in advance to ensure that the recording would be performed correctly in terms of picture or sound quality.
- SHARP cannot be held responsible nor make any compensations even if pictures or sound cannot be recorded correctly because of any troubles when using the LCD TV set.

Copyright

Note:

Audio-visual material may consist of copyrighted works which must not be recorded without the authority of the owner of the copyright.

Please refer to relevant law in your country.

Duplicating images and music by copying and/or editing from videocassettes and/or TV programmes that are subject to copyrights is only permitted when the edited or copied versions are used for personal pleasure. With the exception of cases when the user personally is the owner of the copyrights of the object in question or when specific and written permission has been obtained from the owner(s) of the object in question, the user is not permitted to make copies and/or duplications and/or edited versions as this constitutes a violation of the copyright laws, possibly exposing the user to demands for compensation for damages. Therefore, be sure to strictly observe the existing copyright laws.

In addition when using image data that includes third parties, since the use of such images without prior permission may constitute an intrusion on the privacy of third parties, be sure to refrain from such usage.

The recording formats

Still picture	Recording/Playback file format	JPEG (DCF compliant)
	Size of a captured still picture	640×480 dots
Motion picture	Recording file format	SP/LP... ASF (Motion Picture: MPEG-4 compliant, Sound: WMA-compliant) EP..... ASF (Motion Picture: MPEG-4 compliant, Sound: G.726-compliant)
	Size of a recorded motion picture/number of frames	SP ... Size: 320×240 dots, Frame: approx. 25 frames/sec (50 Hz) LP ... Size: 320×240 dots, Frame: approx. 25 frames/sec (50 Hz) EP ... Size: 320×240 dots, Frame: approx. 12.5 frames/sec (50 Hz)
	Playback file format	ASF (Motion Picture: MPEG-4 compliant, Sound: WMA-compliant) ASF (Motion Picture: MPEG-4 compliant, Sound: G.726-compliant)

* Motion picture files and still image files recorded, stored or edited with other devices may not play back correctly.

Approximate number of recordable pictures/time

Still pictures

	Picture size	Memory card capacity	
		32MB	128MB
Recordable Pictures	640×480	Approx. 300 pictures	Approx. 1000 pictures

* Recordable numbers may vary depending on the receiving condition of the LCD TV set and/or content of images.

Motion pictures

	Picture size	Recording mode	Memory card capacity	
			256MB	5GB
Recordable time	320×240	SP	Approx. 10 min.	Approx. 4h
	320×240	LP	Approx. 30 min.	Approx. 10h
	320×240	EP	Approx. 1h	Approx. 25h

- Recordable time may vary depending on receiving condition of the LCD TV set or content of images.
- The maximum amount of data you can record on a memory card is 1,000 pictures in total including still and motion pictures.
- Files in excess of 4GB and files exceeding 12 hours of recording time cannot be recorded and/or played back.

Using memory card

You can use memory cards (commercially available) for recording and playing back pictures.

- Please use an appropriate PC card adaptor (commercially available) for each memory card.
- Following memory cards are available. (Note that names for memory cards vary depending on manufacturers.)

Memory card name	Storage capacity
SD Memory Card	512 MB or less
mini SD™ Card	32 MB or less
CompactFlash	2 GB or less
MultiMediaCard	128 MB or less
SmartMedia	128 MB or less
Memory Stick	128 MB or less
Memory Stick PRO	1 GB or less
Microdrive	2 GB or less
xD Picture Card	128 MB or less
PC Card Hard Disk	5 GB or less

* Each memory card name is a trademark.

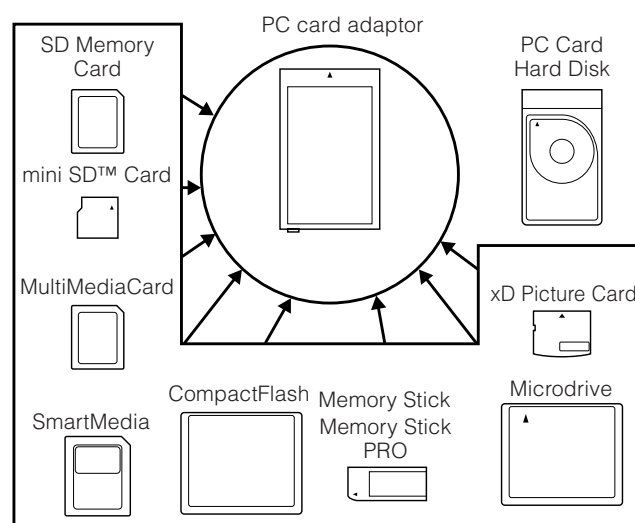
* The capacity of memory card is approximate. The capacity varies depending on the manufacturer.

- To read picture files recorded with digital cameras, use the PC card adaptor recommended by the corresponding manufacturer. (The names for PC card adaptors vary depending on manufacturers.)
- For directions for use of digital cameras or PC card adaptors, please refer to the operation manual provided for each product.
- Depending on the card or adaptor used, normal operation may not be possible.

You can playback DCF compliant JPEG pictures captured with other devices in the card playback mode.

- DCF (Design rule for Camera File system) is a standard of the Japan Electronics and Information Technology Industries Association (JEITA). This standard specifies the image file format used for images shot with a digital camera.
- Some motion pictures recorded with other devices may not be played back correctly.

Commercially available memory cards



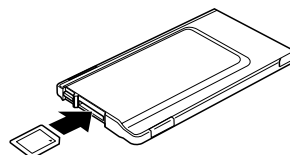
- Please use an appropriate PC card adaptor (commercially available) for each memory card.

Preparing a memory card

Insert a memory card (commercially available) into a PC card adaptor (commercially available).

Example:

Inserting the SD memory card into a PC card adaptor.



Notes on using memory cards and PC card adaptor

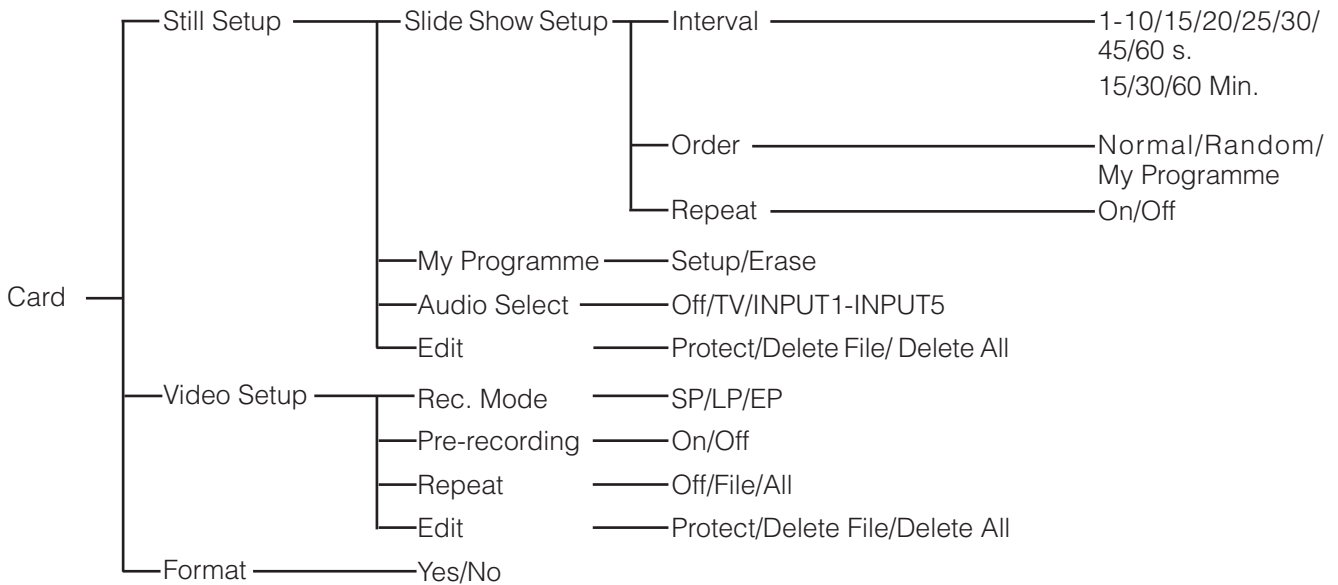
Please note the following when using memory cards and PC card adaptors to avoid corruption of data or malfunction of the LCD TV set.

- If you use memory cards other than those shown above, recording or playing back pictures are not guaranteed.
- Some PC card adaptors have restrictions of memory card capacity. Refer to the relevant operation manual for such restrictions.
- Some pictures which have been created, modified, or copied on your PC may not be played back.
- Please be sure to turn off the LCD TV set when you insert or remove a PC card adaptor.
- Do not bend, drop or apply a shock to memory cards or PC card adaptors.
- Keep memory cards or PC card adaptors away from heat, water or direct sunlight.
- Do not dismantle or modify memory cards or PC card adaptors.
- Refer to the appropriate operation manuals for details on using or keeping memory cards or PC card adaptors.
- Do not turn the LCD TV set off while a memory card is in operation (e.g. playing back, recording or displaying a slideshow).
- The recorded data may be erased or changed due to incorrect operation, the influence of static electricity and electrical noise, therefore be sure to back-up the data regularly.
- Be sure to back-up important files using other media such as a PC.

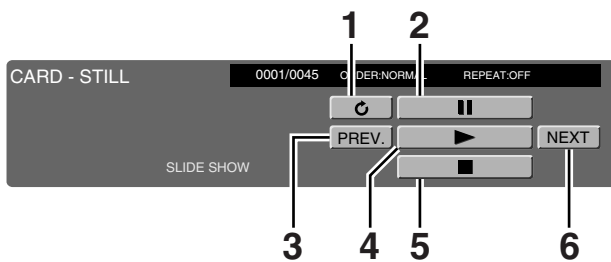
Using memory card

Card Setup mode menu items

Press **CARD** first to access following items.

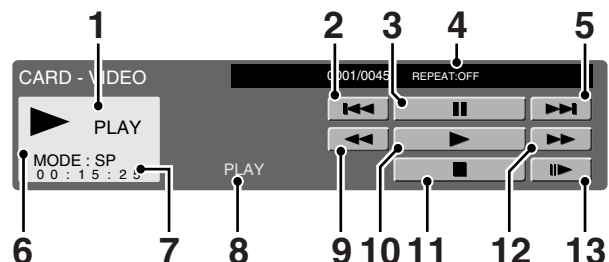


Slide show operation panel



- 1 Rotate the image
- 2 Pause
- 3 Go to previous image
- 4 Start slide show
- 5 Stop slide show
- 6 Go to next image

Motion picture operation panel



- 1 Action
- 2 Go back to the beginning of the file
- 3 Pause
- 4 Repeat playback setting
- 5 Go to the beginning of the next file
- 6 Recording mode
- 7 Counter
- 8 Current action
- 9 Reverse
- 10 Playback
- 11 Stop
- 12 Fast forward
- 13 Slow playback

Precautions when playing back PC image data on the LCD TV

Recording formats of image data:

When recording image data on the LCD TV, the recording formats are as follows.

- When recording motion pictures: The SD_VIDEO folder is created and the data is stored in. When playing the card, the SD_VIDEO recording format is recognised.
- When recording still pictures: The DCIM folder is created and the data is stored in. When playing the card, the DCIM recording format is recognised.

When playing the card, record PC data in a recording format the LCD TV can recognise.

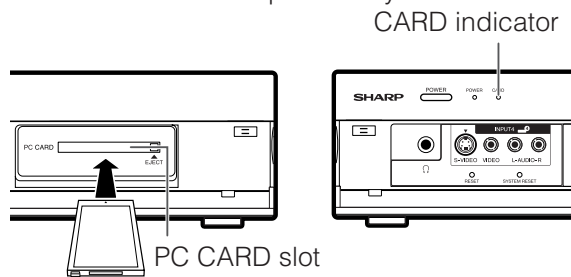
1. When copying motion pictures from a PC to a card recorded with the LCD TV, only play these pictures after placing them in the SD_VIDEO folder.
2. When copying still pictures from a PC to a card recorded with the LCD TV, only play these pictures after placing them in the DCIM folder.
3. When using a new card for copying motion pictures, first format the card and create an SD_VIDEO folder before placing the data in the folder for playback.
4. When using a new card for copying still pictures, first format the card and create a DCIM folder before placing the data in the folder for playback.

When creating, revising, or copying images using your PC, the edited images may not playback correctly.

Using memory card

Inserting a PC card adaptor

- Press in the EJECT button if it is popped out.
- Insert a memory card to a PC card adaptor beforehand. (See page 35.)
- Insert the PC card adaptor slowly.



- CARD indicator lights up green when the card is inserted.

NOTE

- When "Card is not inserted" is displayed, eject the PC card adaptor, and then insert the PC card adaptor slowly all the way to the end.
- When over a thousand files are in a card, it takes several minutes to load. (approx. 5 minutes.)
- Even if the green light is on, you can not record on a card right after you inserted it.
- Make sure the CARD indicator lights green when you take out a card. Never take out a card when the CARD indicator lights red. This may damage the card.

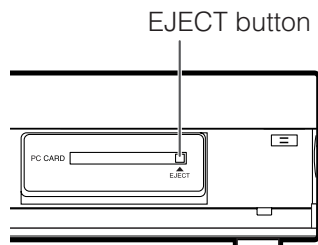
Ejecting the card

- Make sure the card indicator lights up green.

1

Press **EJECT** button.

- EJECT button is popped up.



2

Press **EJECT** button again.

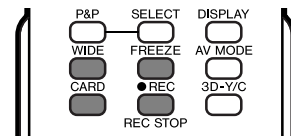
- PC card adaptor itself pops up.

3

Take out the PC card adaptor.

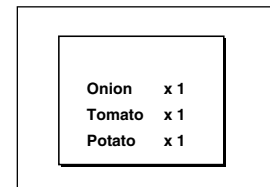
Recording a still image

You can record a still image on the card.



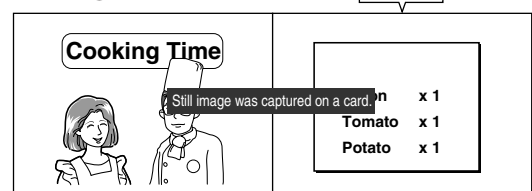
1

Press **FREEZE**.



2

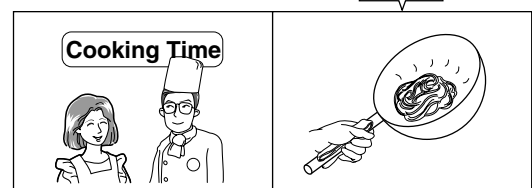
Press **REC**.



- "Still image was captured on a card." displays.
- Recording may fail depending on the input signal type or card memory status.

3

Press **ENTER** to update the still image.



NOTE

Broadcasting types or input signals not available for recording:

- ① COMPONENT input
- ② Copy guarded signal
- ③ DVI-I input

Selecting Still mode

1

Press **CARD** and the card mode screen displays.

2

Press **◀/▶** to select "Still", and then press **ENTER**.

- When in CARD mode, press **0-9** or **TV/VIDEO** to switch either TV or AV input mode.

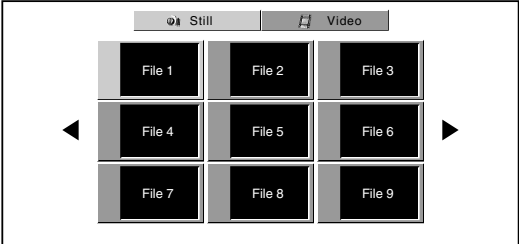
Using memory card

Displaying a still image

- 1

Press **CARD** and the card mode screen displays.
- 2

Press **◀/▶** to select “Still” and then press **ENTER**.
- 3

Press **▲/▼/◀/▶** to select a file you want to display, and then press **ENTER**.
- 
- To display the files that are in the previous or next page, select **◀/▶** on the index screen and press **ENTER**.
 - When viewing a still image, by pressing **WIDE** the image size changes. Normal – Full. This function does not work when displaying the index screen.

Displaying slide show

- 1

Repeat steps 1 to 3 in **Displaying a still image**.
 - The operation panel displays.
- 
- 2

Press **▲/▼/◀/▶** to select **▶**, and then press **ENTER**.
 - Slide show starts.
 - Operate slide show with the operation panel on the screen.
 - To turn off the operation panel, press **CARD** on the remote control.
 - Press **||** to pause the slideshow, and press **■** to return to the index screen.

NOTE

- See page 36 for operation panel function.
- You cannot rotate the image during slide show. Stop slide show to rotate the image.

Setting Slide Show

You can adjust the interval, order and repeat settings.

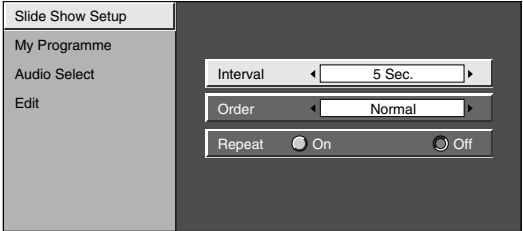
- 1

Press **CARD** and the card mode screen displays.
- 2

Press **MENU** and the MENU screen displays.
- 3

Press **◀/▶** to select “Card”.
- 4

Press **▲/▼** to select “Still Setup”, and then press **ENTER**.
- 5

Press **▲/▼** to select “Slide Show Setup” and then press **ENTER**.
- 
- 6

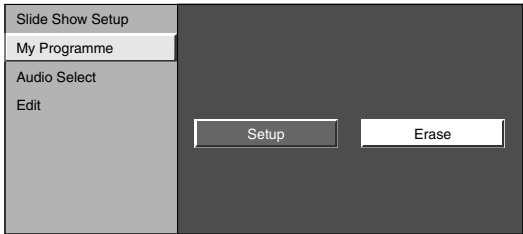
Press **▲/▼/◀/▶** to select the desired slide show setting, and then press **ENTER**.

Selected item	Description
Interval	Set the frame interval for a slideshow.
Order	Set the frame order for a slideshow. See My Programme for details.
Repeat	If set to “On”, the slideshow will play again after showing the last frame.

Using memory card

My Programme

You can select up to thirty-two pictures and specify the order for displaying in slide show.

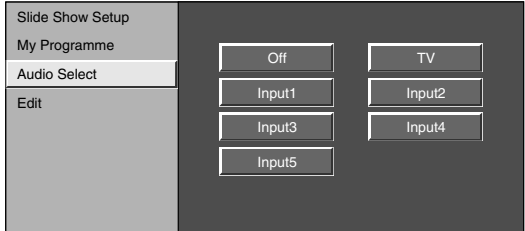
- 1 Press **CARD** and the card mode screen displays.
- 2 Press **MENU** and the MENU screen displays.
- 3 Press **◀/▶** to select "Card".
- 4 Press **▲/▼** to select "Still Setup", and then press **ENTER**.
- 5 Press **▲/▼** to select "My Programme", and then press **ENTER**.

- 6 Press **◀/▶** to select "Setup", and then press **ENTER**.
- 7 Press **▲/▼/◀/▶** to select the files, and then press **ENTER**.
- 8 Repeat the operation in step 7. (You can select up to 32 files.)
- 9 After selecting all the files you want, press **RETURN** to return to MENU.

To cancel My Programme setting

- 1 Select "Erase" at step 6 in **My Programme** and then press **ENTER**.
- 2 Press **◀/▶** to select "Yes", and then press **ENTER**.
 - All the registered numbers are cleared.

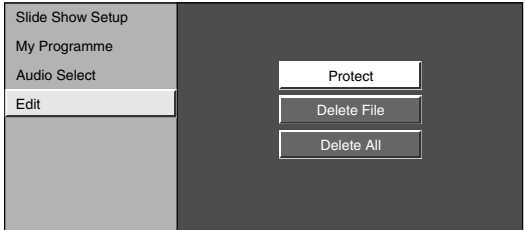
Audio Select

You can enjoy the audio from the System or other external equipment during the still image playback.

- 1 Repeat steps 1 to 4 in **My Programme**.
- 2 Press **▲/▼** to select "Audio Select", and then press **ENTER**.

- 3 Press **▲/▼/◀/▶** to select the desired sound output, and then press **ENTER**.

Protecting/unprotecting still image files

You can protect any file you do not want to delete.

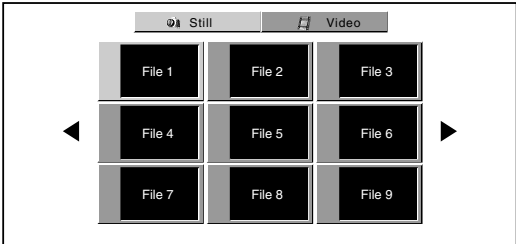
- 1 Repeat steps 1 to 4 in **My Programme**.
- 2 Press **▲/▼** to select "Edit", and then press **ENTER**.

- 3 Press **▲/▼** to select "Protect", and then press **ENTER**.
 - The list of still image files displays.
- 4 Press **▲/▼/◀/▶** to select the file you want to protect, and then press **ENTER**.
 - Protect mark (🔒) displays.
 - Select the file with a protect mark and press **ENTER** to unprotect it.

NOTE

- You cannot delete a protected file on the card.

Using memory card

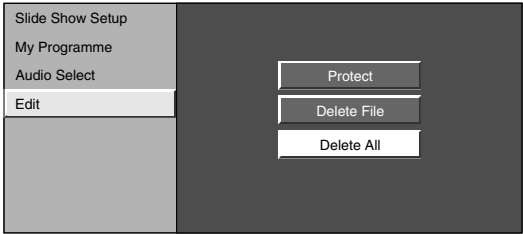
Deleting a still image file

- 1 Repeat steps 1 to 4 in **My Programme**.
- 2 Press **▲/▼** to select "Edit", and then press **ENTER**.
- 3 Press **▲/▼** to select "Delete File", and then press **ENTER**.
- 4 Press **▲/▼/◀/▶** to select the file you want to delete, and then press **ENTER**.

- 5 Press **◀/▶** to select "Yes", and then press **ENTER**.
- 6 Repeat the operations in steps 4 and 5 above.
- 7 After deleting the images you no longer need, press **RETURN** to return to MENU.

NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.

Deleting all still image files

- 1 Select "Delete All" instead of "Delete File" in step 6 in **Deleting a still image file**.

- 2 Press **◀/▶** to select "Yes", and then press **ENTER**.

NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.

Recording a motion picture

Use this setting to record images you are currently watching.

Record with the settings made in "Rec. Mode" and "Pre-recording".

- 1 Press **● REC** to start recording.
 - CARD indicator lights up red.
 - Recording information displays in the lower right corner of the screen.
- 2 Press **● REC** to stop recording.

NOTE

Broadcasting types or input signals not available for recording:

- ① COMPONENT input
- ② Copy guarded signal
- ③ DVI-I input

To display the remaining record time.

Press **DISPLAY** while not recording.

- Remaining record time displays in the lower right corner of the screen.

NOTE

- Do not press **POWER** on the Display while recording. Recording cannot finish properly and may damage the file.
- Recording stops if you press **POWER** on the remote control while recording.
- When card has no capacity for recording, "Card is full" displays and stops recording.
- You cannot change the channel or switch the input source while recording.

Selecting Video mode

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **◀/▶** to select "Video", and then press **ENTER**.
 - When in CARD mode, press **0-9** or **TV/VIDEO** to switch either TV or AV input mode.

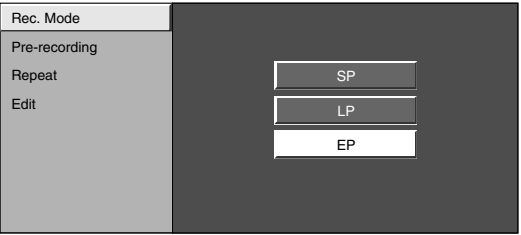
Using memory card

Displaying a motion picture

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **◀/▶** to select “Video”, and then press **ENTER**.
- 3 Press **▲/▼/◀/▶** to select the file you want to play, and then press **ENTER**.
 - Video playback starts.
- 4 Press **CARD** again to display the operation panel.
 - See page 36 for the operation panel information.
 - When viewing a motion picture, by pressing **WIDE** the picture size changes. Small – Medium – Large.

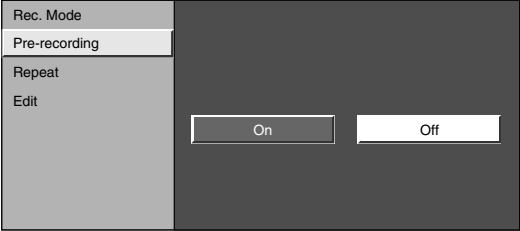
Rec. Mode

Use this setting for recording images you are currently watching. You can select the recording mode (picture quality) for a motion picture.

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **MENU** and the MENU screen displays.
- 3 Press **◀/▶** to select “Card”.
- 4 Press **▲/▼** to select “Video Setup” and then press **ENTER**.
- 5 Press **▲/▼** to select “Rec. Mode”, and then press **ENTER**.
- 6 Press **▲/▼** to select the desired mode, and then press **ENTER**.

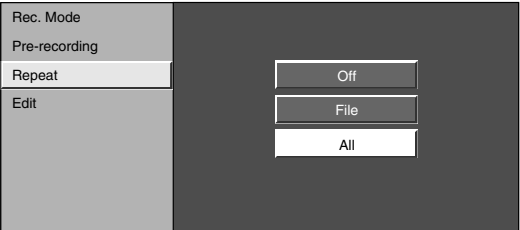
Pre-recording

You can record the picture slightly before the point where you pressed the record button, enabling you to record just the scene you wanted.

- 1 Repeat steps 1 to 4 in **Rec. Mode**.
- 2 Press **▲/▼** to select “Pre-recording”, and then press **ENTER**.
- 3 Press **◀/▶** to select “On”, and then press **ENTER**.

Repeat

You can specify one file or all files to replay repeatedly.

- 1 Repeat steps 1 to 4 in **Rec. Mode**.
- 2 Press **▲/▼** to select “Repeat”, and then press **ENTER**.
- 3 Press **▲/▼** to select desired setting, and then press **ENTER**.

Selected item	Description
Off	No playback or repeat.
File	Plays back and repeats one file.
All	Plays back all movie files on the card then repeats.

Using memory card

Protecting/unprotecting motion picture files

You can protect any file you do not want to delete.

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **MENU** and the MENU screen displays.
- 3 Press ◀/▶ to select "Card".
- 4 Press ▲/▼ to select "Video Setup" and then press **ENTER**.
- 5 Press ▲/▼ to select "Edit", and then press **ENTER**.
- 6 Press ▲/▼ to select "Protect", and then press **ENTER**.
- 7 Press ▲/▼/◀/▶ to select the file you want to protect, and then press **ENTER**.
 - Protect mark (🔒) displays.
 - Select the file with a protect mark and press **ENTER** to unprotect it.
- 8 Repeat the operation in step 7.
- 9 After setting the files you want to protect, press **RETURN** to return to MENU.

Deleting a motion picture file

- 1 Repeat steps 1 to 5 in **Protecting/unprotecting motion picture files**.
- 2 Press ▲/▼ to select "Delete File", and then press **ENTER**.
- 3 Press ▲/▼/◀/▶ to select the file you want to delete, and then press **ENTER**.
- 4 Press ◀/▶ to select "Yes", and then press **ENTER**.
- 5 Repeat the operations in steps 3 and 4 above.
- 6 After deleting the images you no longer need, press **RETURN** to return to MENU.

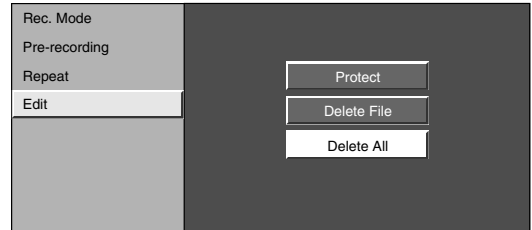
NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.

Deleting all motion picture files

- 1 Repeat steps 1 to 5 in **Protecting/unprotecting motion picture files**.

- 2 Press ▲/▼ to select "Delete All", and then press **ENTER**.



- 3 Press ◀/▶ to select "Yes", and then press **ENTER**.

NOTE

- You cannot delete a protected file on the card.
- Do not turn off the power or take out a card when deleting a file. The card may malfunction.

Format

- 1 Press **CARD** and the card mode screen displays.
- 2 Press **MENU** and the MENU screen displays.
- 3 Press ◀/▶ to select "Card".
- 4 Press ▲/▼ to select "Format" and then press **ENTER**.
- 5 Press ◀/▶ to select "Yes", and then press **ENTER**.

NOTE

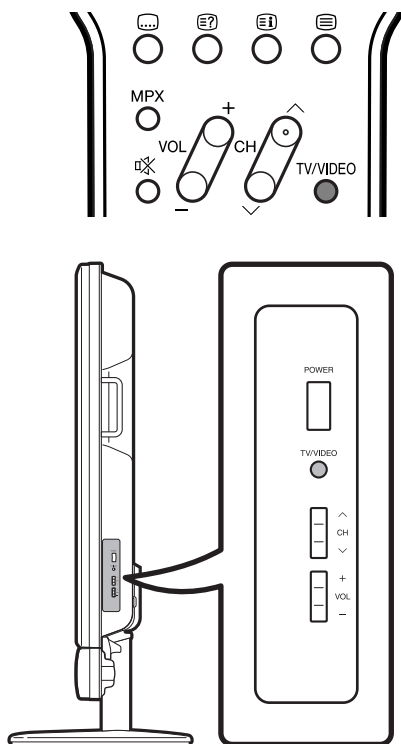
- Formatting a card deletes all files including the ones which set to protect.

Using external equipment

You can connect many types of external equipment to your System, like a VCR, DVD player, PC, HDTV tuner, game console and camcorder. To view external source images, select the input source from **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the Display.

Displaying an external equipment image

Explanation here is for the setting when connecting DVD to INPUT3 terminal.



CAUTION

- To protect all equipment, always turn off the AVC System before connecting to a VCR, DVD player, PC, HDTV tuner, game console, camcorder or other external equipment.

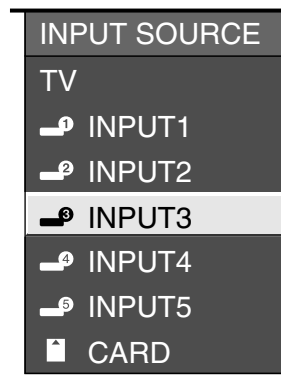
NOTE

- See pages 44 to 46 for external equipment connection.
- Refer to the relevant operation manual (VCR, DVD player, PC, etc.) carefully before making connections.
- Each time **TV/VIDEO** is pressed, the input source toggles.
- If the image does not come in clearly, you may need to change the input signal type setting on the "Input Select" menu.
- Refer to your external equipment operation manual for the signal type.

Displaying a DVD image (Example)

1

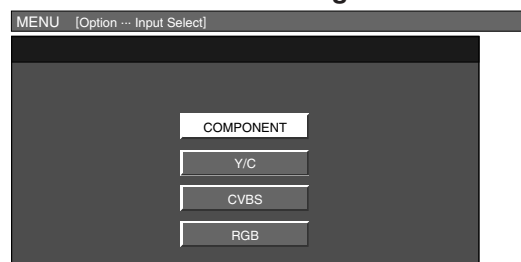
To watch a DVD image, select "INPUT3" from "INPUT SOURCE" menu using **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the Display.



2

Select the desired signal type on "Input Select" in the "Option" menu. (See page 49.)

For INPUT3 signal



The setting is stored and can be selected on the "INPUT SOURCE" menu.

Using external equipment

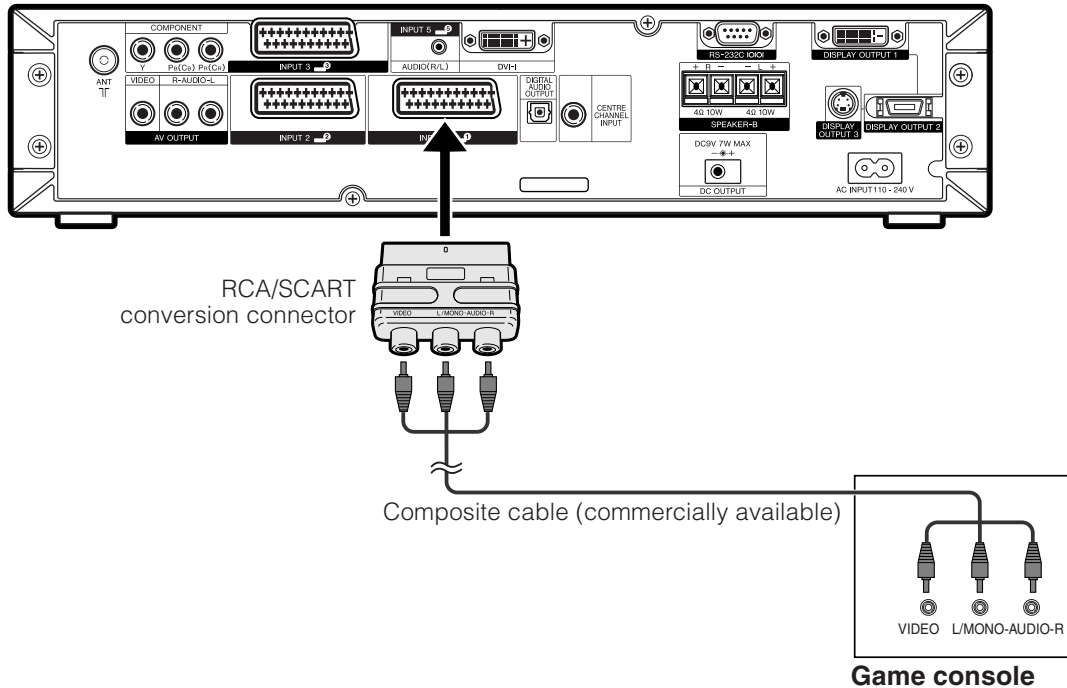
The System can be connected to a SCART terminal on the external equipment with SCART cable. Refer to the operation manual of the external equipment for details.

When connecting a game console using composite cable

You can use the INPUT 1, 2 or 3 terminal when connecting a game console and other audiovisual equipment.

To watch an image from this input terminal, you may need to select the input signal type (see page 49).

AVC System (rear view)

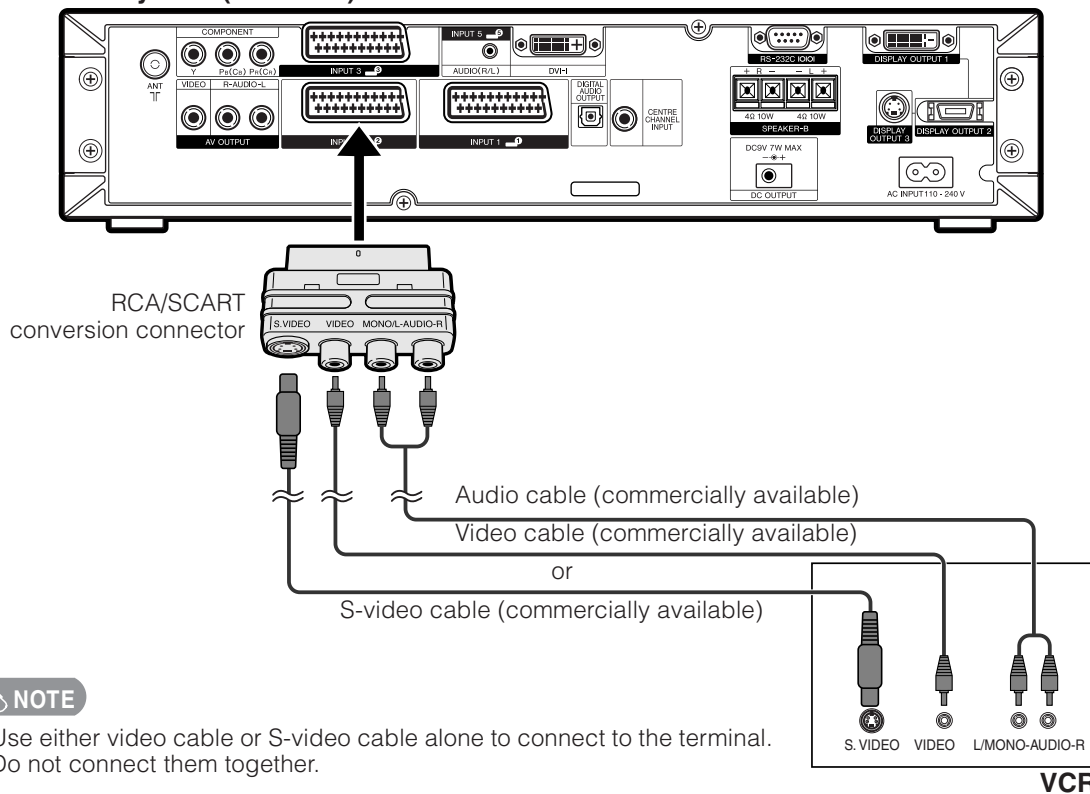


When connecting a VCR using S-video cable

You can use the INPUT 2 or INPUT 3 terminal when connecting a VCR and other audiovisual equipment.

To watch an image from this input terminal, you may need to select the input signal type (see page 49).

AVC System (rear view)



NOTE

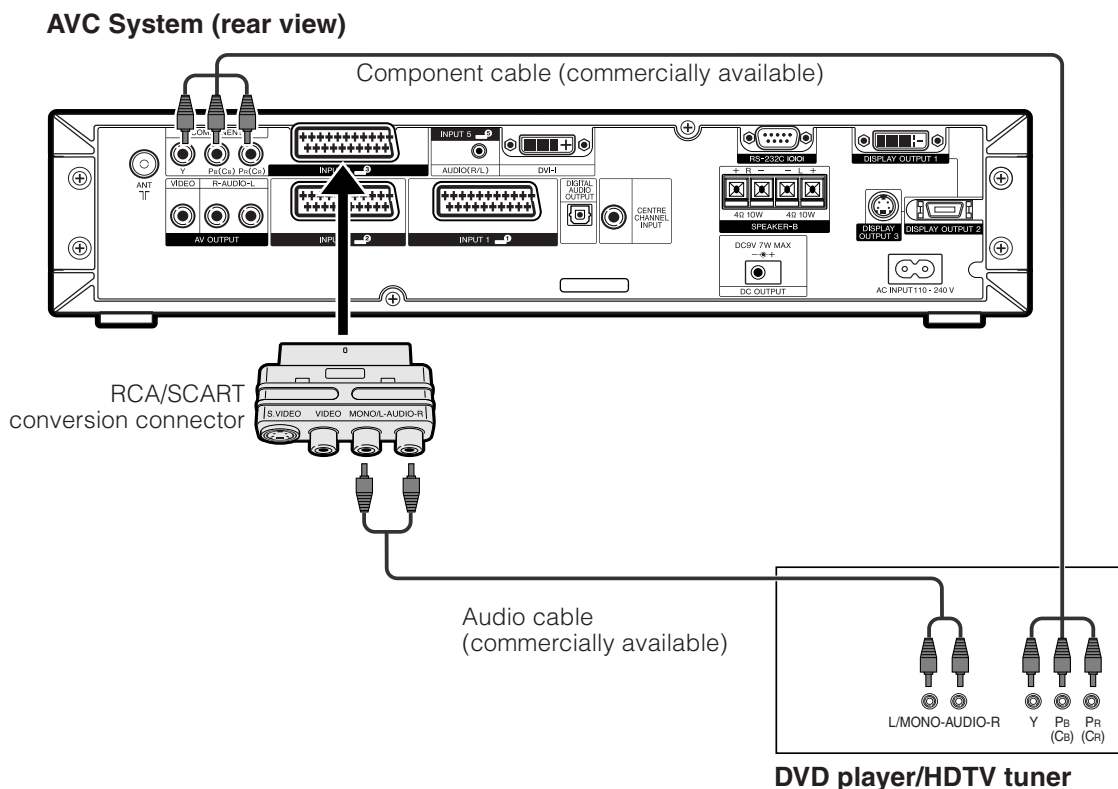
- Use either video cable or S-video cable alone to connect to the terminal. Do not connect them together.

Using external equipment

When connecting a DVD player or an HDTV tuner using component cable

You can use the INPUT 3 terminal when connecting a DVD player or an HDTV tuner and other audiovisual equipment.

To watch an image from this input terminal, you may need to select the input signal type (see page 49).



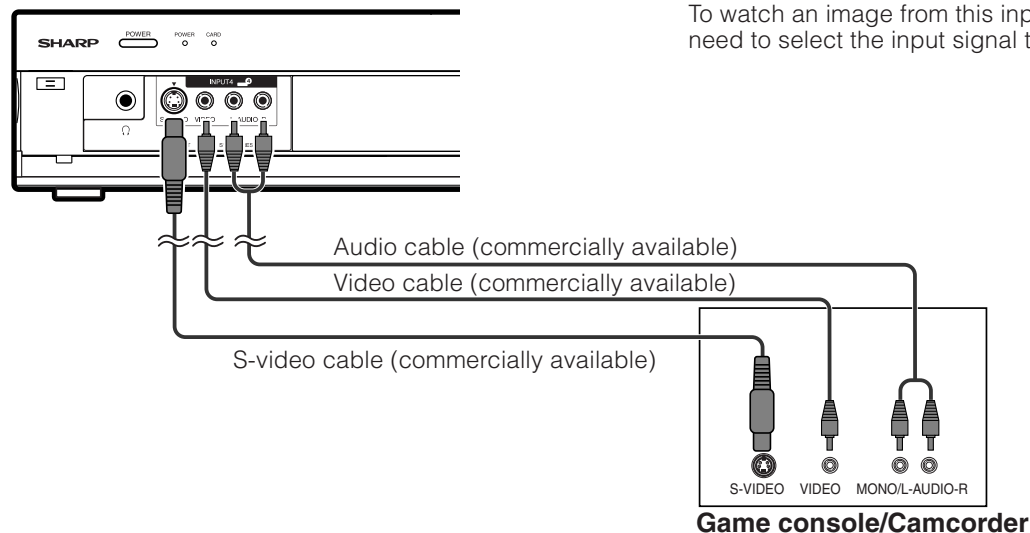
Connecting a game console or camcorder

A game console, camcorder and some other audiovisual equipment are conveniently connected using the INPUT 4 terminals.

NOTE

- The S-video terminal has priority over the video terminals.
- You can also connect the game console to INPUT 1, 2 or 3 terminals to enjoy clearer picture.

AVC System (front view)



To watch an image from this input terminal, you need to select the input signal type (see page 49).

Using external equipment

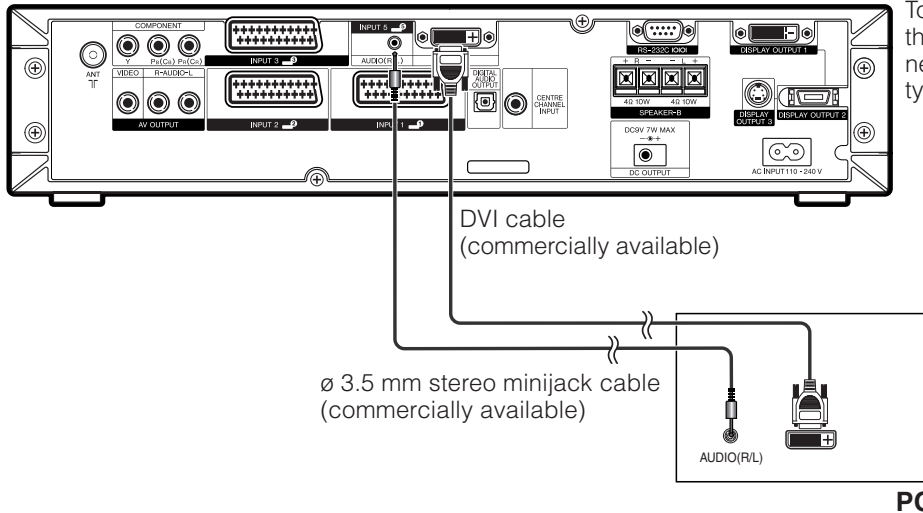
Connecting a PC

Use the INPUT5 terminals to connect a PC.

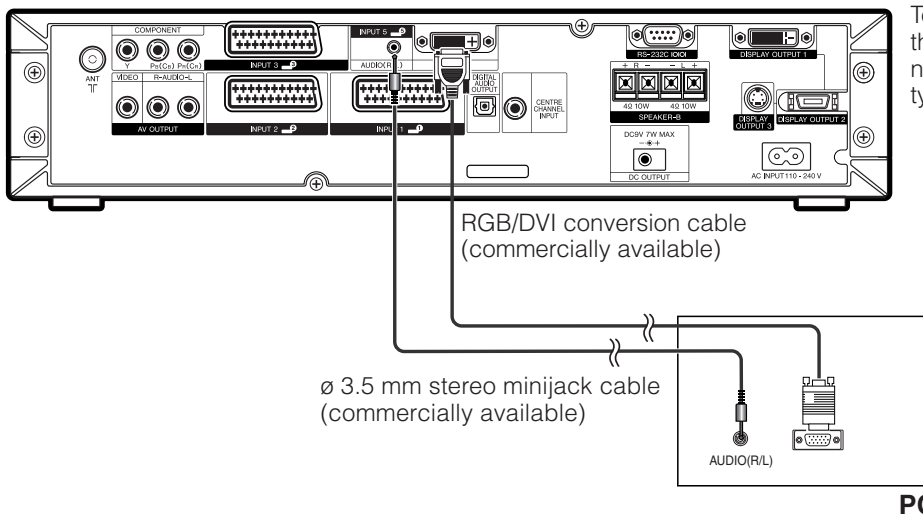
NOTE

- The PC input terminals are DDC1/2B-compatible.
- Refer to page 63 for a list of PC signals compatible with the System.

AVC System (rear view)



To watch the image from this input terminal, you need to select input signal type (see page 49).



To watch the image from this input terminal, you need to select input signal type (see page 49).

NOTE

- Macintosh adaptor may be required for use for some Macintosh computers.
- When connecting to a PC, the correct input signal type is automatically detected. (See page 54.) If the PC image does not come in clearly, you may need to set the Auto Sync. adjustment in the "Setup" menu. (See page 48.)

Using external equipment

Speaker Setup

Connecting external speakers

CAUTION

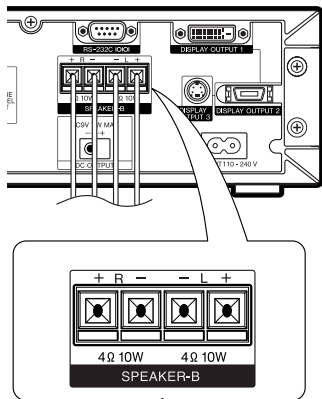
- Press **POWER** to turn the power off before connecting/disconnecting speaker cables.

- 1 Disconnect the speaker cables for the supplied speaker from the speaker terminals.
- 2 Connect the speaker cables for external speakers to the speaker terminals.

When using external speakers

- Change the speaker setting to “SPEAKER-B”.
- Be sure to connect the speaker terminal and cable polarity (+, -) properly
- The speaker terminal has plus (+) and minus (-) polarity.
- Plus is red and minus is black.
- The cables are also divided into plus and minus.
- When connecting the left/right speakers, be sure to connect the plus/minus terminals with the correct cables.

Rear view



How to connect the speaker cable

- ① Push down the tab.
- ② Insert the end of the cable.
- ③ Lift the tab back up.

NOTE

- Unplug the AC cord from the AC outlet before installing the speakers.

CAUTION

- Make sure external speakers have 4 ohm and 10 watt specifications.
- Connect the plus/minus terminals with the correct cables. Incorrect connection may cause a short.

Selecting speakers

You can output audio using the supplied speakers or other external speakers.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “Setup”.
- 3 Press **▲/▼** to select “Speaker Setup”, and then press **ENTER**.
- 4 Press **▲/▼** to select “Speaker”, and then press **ENTER**.
- 5 Press **◀/▶** to select “SPEAKER-A” or “SPEAKER-B”, and then press **ENTER**.

Selected item	Description
SPEAKER-A	Speaker connected to the Display.
SPEAKER-B	Speaker connected to the AVC System.

External Audio Bypass

External Audio Bypass automatically optimises the audio quality to suit internal (supplied) speakers.

- 1 Repeat steps 1 to 3 in **Selecting speakers** above.
- 2 Press **▲/▼** to select “External Audio Bypass”, and then press **ENTER**.
- 3 Press **◀/▶** to select “Yes” or “No”, and then press **ENTER**.

Selected item	Description
No	Sets the optimum audio for the internal (supplied) speakers.
Yes	When you are using your own speakers, output the original sound.

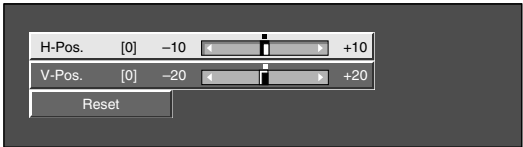
NOTE

- External Audio Bypass is greyed out when Dolby Virtual is set to “On”.
- When using external speakers (SPEAKER-B), make sure to set “External Audio Bypass” to “Yes”.
- When Dolby Virtual is on, External Audio Bypass automatically sets to “Yes”.

Useful adjustment settings

Image position (for TV/AV input mode)

For adjusting a picture's horizontal and vertical position.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀▶ to select "Setup".
- 3 Press ▲▼ to select "Position", and then press **ENTER**.
- 4 Press ▲▼ to select "H-Pos." or "V-Pos.". 
- 5 Press ◀▶ to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to factory preset values, press ▲▼ to select "Reset", press **ENTER**, press ◀▶ to select "Yes", and then press **ENTER**.
- **Adjustments are stored separately according to input source.**
- This function is available for AV input mode and TV tuner mode.

Selected item	Description
H-Pos.	Centres the image by moving it to the left or right.
V-Pos.	Centres the image by moving it up or down.

Audio Only

When listening to music from a music programme, you can set the display off and enjoy audio only.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀▶ to select "Option".
- 3 Press ▲▼ to select "Audio Only", and then press **ENTER**.
- 4 Press ◀▶ to select "On", and then press **ENTER**.

Selected item	Description
On	Audio is output without screen image.
Off	Both screen images and audio are output.

Auto Sync. adjustment (PC input mode only)

For automatically adjusting the PC image.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press ◀▶ to select "Setup".
 - Setup menu displays.
- 3 Press ▲▼ to select "Auto Sync.", and then press **ENTER**.
- 4 Press ◀▶ to select "Yes", and then press **ENTER**.
 - Auto Sync. starts and "Adjusting the image" displays.



NOTE

- When Auto Sync. is successful, "Auto Sync completed successfully" displays. If not, Auto Sync. failed.
- Auto Sync. may fail even if "Auto Sync completed successfully" displays.
- Auto Sync. is likely to succeed when an input PC image has wide vertical stripes (ex. pattern with high contrast stripes, or cross-hatched). It may fail when an input PC image is solid (low contrast).
- Be sure to connect the PC to the AVC System and switch it on before starting Auto Sync.

Useful adjustment settings

Fine Sync. adjustment (PC input mode only)

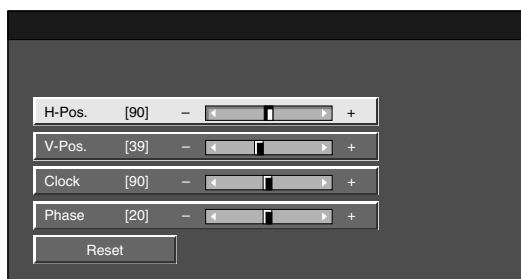
Ordinarily you can easily adjust the picture as necessary to change image position using Auto Sync. In some cases, however, manual adjustment is needed to optimise the image.

1 Press **MENU** and the MENU screen displays.

2 Press **◀/▶** to select "Setup".

3 Press **▲/▼** to select "Fine Sync.", and then press **ENTER**.

4 Press **▲/▼** to select the specific adjustment item.



5 Press **◀/▶** to adjust the item to your desired position.

NOTE

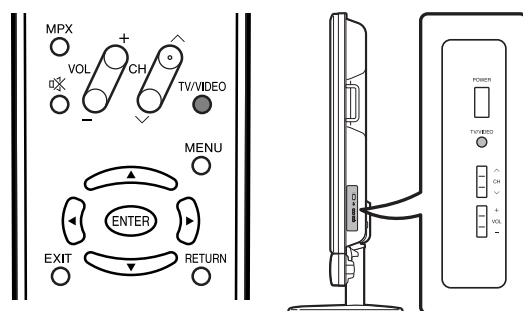
- For resetting all adjustment items to factory preset values, press **▲/▼** to select "Reset", press **ENTER**, press **◀/▶** to select "Yes", and then press **ENTER**.

Selected item	Description
H-Pos.	Centres the image by moving it to the left or right.
V-Pos.	Centres the image by moving it to the up or down.
Clock	Adjusts when the image flickers with vertical stripes.
Phase	Adjusts when characters have low contrast or when the image flickers.

Input Select

Selecting input source

Can use for selecting the input source.



1 Press **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the Display.

2 Press **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the Display to select the input source.

- An image from the selected source automatically displays.
- You can also select the input source by pressing **▲/▼**.

Selecting input signal type

For setting the signal type of external equipment.

1 Press **MENU** and the MENU screen displays.

2 Press **◀/▶** to select "Option".

3 Press **▲/▼** to select "Input Select", and then press **ENTER**.

4 Press **▲/▼/◀/▶** to select a signal type you want to set, and then press **ENTER**.

- If the selected signal type is incorrect, an image does not display or no colour image displays.

Input type	Selectable item
INPUT 1	CVBS, RGB*
INPUT 2	Y/C, CVBS
INPUT 3	COMPONENT, Y/C, CVBS, RGB*
INPUT 4	AUTO, S-Video, Video
INPUT 5	PC digital, PC analogue, AV digital, AV analogue

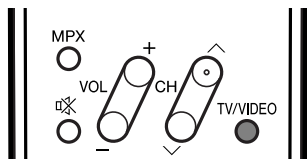
NOTE

- If no (colour) image displays, try to change the other signal type.
- Check the operation manual of the external equipment for the signal type.
- Use 21 Pin Euro SCART cable if you wish to input RGB signal.
- * RGB signal is displayed in INPUT 1 and INPUT 3 but is not applicable when using RCA/21 Pin-Euro SCART conversion connector.

Useful adjustment settings

Input Label

You can assign each input source a label you like.



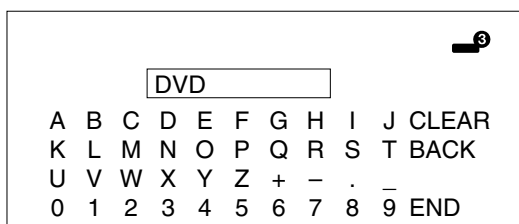
1 Press **TV/VIDEO** to select the input source whose label you would like to change.

2 Press **MENU** and the MENU screen displays.

3 Press **◀▶** to select "Setup".

4 Press **▲▼** to select "Input Label", and then press **ENTER**.

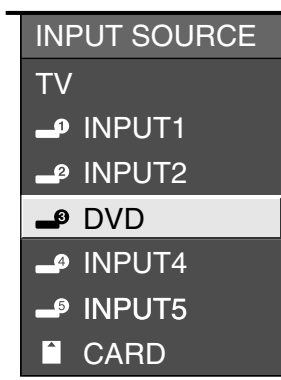
5 Press **▲▼/◀▶** to select each character of the new name for the input source, and then press **ENTER**.



(Example)

6 Repeat the above until the name is fully spelt out, and then press **ENTER**.

- The name can be 6 characters or less.



(Example)

NOTE

- You cannot change labels if the INPUT SOURCE is TV or CARD.

Colour system setting (for TV/AV input mode)

You can change the colour system to one that is compatible with the image on the screen.

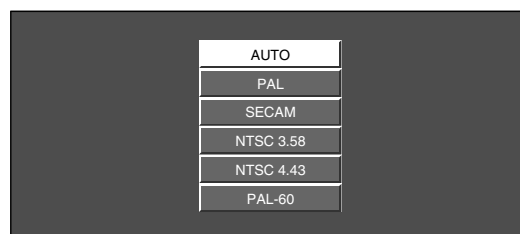
1 Press **MENU** and the MENU screen displays.

2 Press **◀▶** to select "Option".

3 Press **▲▼** to select "Colour System", and then press **ENTER**.

4 Press **▲▼** to select a compatible video signal system of your equipment, and then press **ENTER**.

- Some items may be greyed out. They are not selectable.



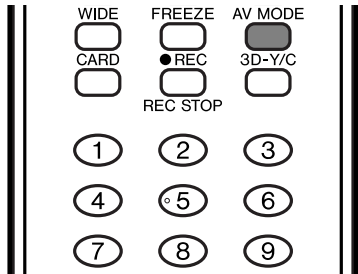
NOTE

- Factory preset value is "AUTO".
- If "AUTO" is selected, colour system for each channel is automatically set. If an image does not display clearly, select another colour system (e.g. PAL, NTSC 4.43).
- This function is available for AV input mode and TV tuner mode.
- NTSC 3.58 is not available for TV mode.

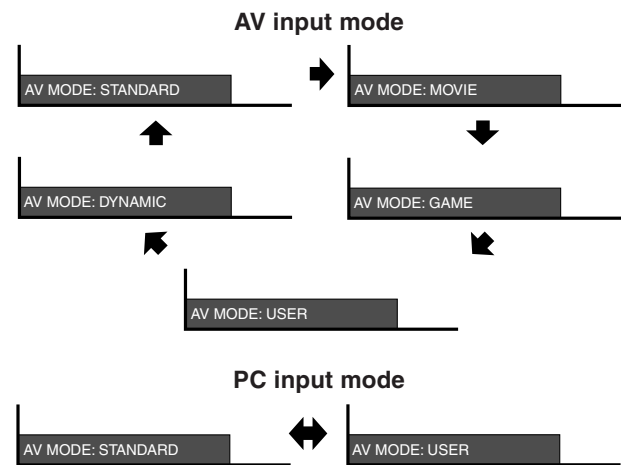
Useful adjustment settings

AV mode selection

AV mode gives you five viewing options to choose from to best match the system environment, which can vary due to factors like room-brightness, type of programme watched or the type of image input from external equipment.



- 1 Press **AV MODE**.
 - Present AV mode displays.
- 2 Press **AV MODE** again before the mode displayed on the screen disappears.
 - The mode changes as shown below.



Selected item	Description
STANDARD	For a highly defined image in a normally bright room
MOVIE	For a movie
GAME	Lowers image brightness for easier viewing.
USER	Allows the user to customise settings as desired. You can set the mode for each input source.
DYNAMIC	For a clear-cut image emphasising high contrast for sports viewing

- NOTE**
- You can select a different AV MODE item for each input mode. (For example, select STANDARD for TV input and DYNAMIC for VIDEO input.)

Wide Screen Signalling (WSS) (for TV/AV input mode)

WSS allows a television to switch automatically among the different screen formats.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “Setup”.
- 3 Press **▲/▼** to select “WSS”, and then press **ENTER**.
- 4 Press **◀/▶** to select “On” or “Off”, and then press **ENTER**.

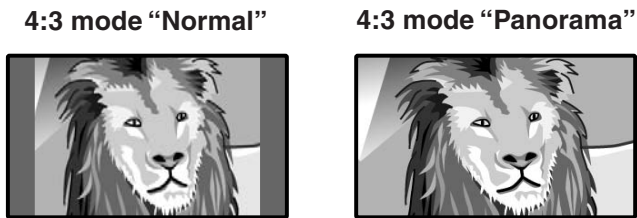
- NOTE**
- Try to set WIDE mode if an image does not switch to the correct screen format. When the broadcast signal contains no WSS information, the function will not work even if enabled.
 - This function is available for AV input mode and TV tuner mode.

Picture aspect ratio (for TV/AV input mode)

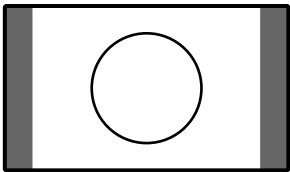
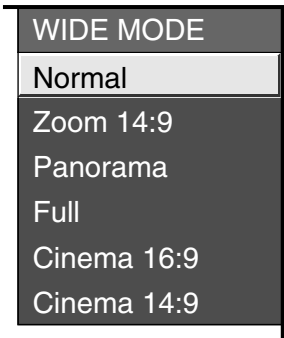
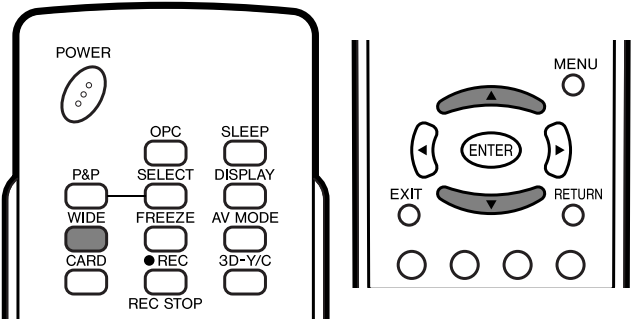
The WSS signal has 4:3 auto-switching that allows you to select between Normal and Panorama.

- 1 Press **MENU** and the MENU screen displays.
- 2 Press **◀/▶** to select “Setup”.
- 3 Press **▲/▼** to select “4:3 Mode”, and then press **ENTER**.
- 4 Press **◀/▶** to select “Normal” or “Panorama”, and then press **ENTER**.

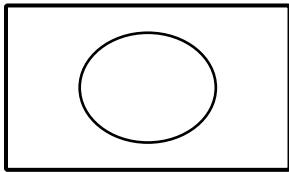
WSS signal 4:3 screen



Selected item	Description
Normal	Normal range keeping 4:3 or 16:9 aspect ratio
Panorama	Wide image without side bars



4:3 Mode set to "Normal"



4:3 Mode set to "Panorama"

WIDE mode (for TV/AV input mode)

Manual Selection

1

Press **WIDE**.

- The WIDE MODE menu displays.
- The menu lists the wide mode options selectable for the type of video signal currently received.

2

Press **WIDE** or **▲/▼** while the WIDE MODE menu displays on the screen.

- As you toggle down the options, each is immediately reflected on the Display. No need to press **ENTER**.

Auto Selection

If you set "WSS" and "4:3 Mode" in the Setup menu on page 51, the optimum WIDE mode is automatically chosen for every broadcast containing the WSS information.

"WSS" menu

To enable Auto Selection, set "WSS" in the Setup menu to "On". (See page 51.)

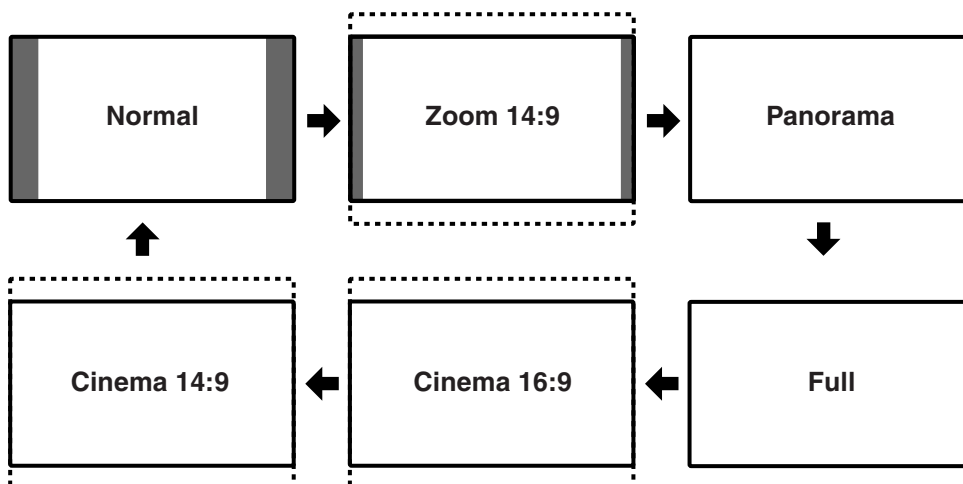
"4:3 Mode" menu

To set the type of the wide screen, select "Normal" or "Panorama" in the 4:3 Mode menu. (See page 51.)

NOTE

- If the broadcast signal contains no WSS information, Auto Selection will not function even when the WSS option is enabled.
- This function is available for AV input mode and TV tuner mode.

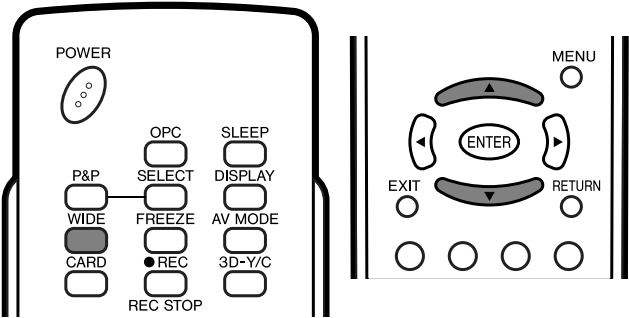
Selected item	Description
Normal	For 4:3 "standard" pictures. A side bar appears on each side.
Zoom 14:9	For 14:9 letterbox pictures. A thin side bar appears on each side, and you may also see bars on the top and bottom with some programmes.
Panorama	In this mode the picture is progressively stretched toward each side of the screen.
Full	For 16:9 squeeze pictures.
Cinema 16:9	For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Cinema 14:9	For 14:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Dot by Dot	Displays an image with the same number of pixels on the screen (only when receiving 1080i signal).



NOTE

- In the case where the signal received is 1080i (when receiving HDTV broadcasts from an external source), mode selections will not alternate as shown and some modes may not be displayed.

Useful adjustment settings



WIDE mode (for PC input mode)

You can select the screen size.

NOTE

- Connect the PC before making adjustments. (See page 46.)
- Selectable screen size may vary with input signal type.

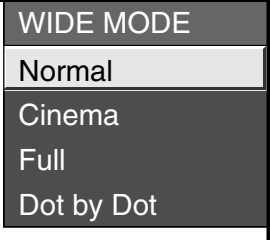
- 1

Press **WIDE**.
 - The WIDE MODE menu displays.
- 2

Press **WIDE** or **▲/▼** to select a desired item on the menu.

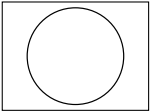
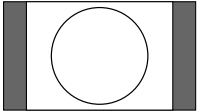
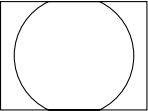
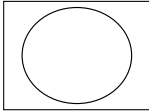
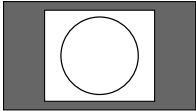
EXAMPLE

Input signal
(640 × 480)



EXAMPLE

Screen size images.

Input Signal	Normal	Cinema	Full	Dot by Dot
 640 × 480	 Keeps the original aspect ratio in a full screen display.	 Keeps the original aspect ratio in a full screen display. The top and bottom of the image is slightly cropped.	 An image fully fills the screen.	 Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

Useful adjustment settings

Input signal (PC input mode only)

- Some input signals may have to be registered manually to display properly.
- The pairs of input signals (resolutions) in the list below are not distinguishable when received. In such case, you have to set the correct signal manually. After setting once, it will display when the same signal (resolution) is input again.

640 × 400	720 × 400
640 × 480	848 × 480
1024 × 768	1280 × 768

NOTE

- You can only select the “Input Signal” on the Setup menu when receiving one of the 6 input signals listed above.

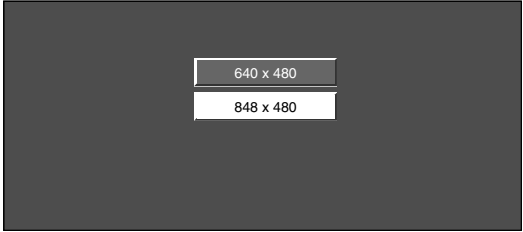
- 1

Press **MENU** and the MENU screen displays.
- 2

Press ◀▶ to select “Setup”.
- 3

Press ▲▼ to select “Input Signal” and then press **ENTER**.
- 4

Press ▲▼ to select the desired input signal on the display.



(Example)

3D-NR (3D Noise Reduction)

Produces a clearer video image.

- 1

Press **MENU** and the MENU screen displays.
- 2

Press ◀▶ to select “Option”.
- 3

Press ▲▼ to select “3D-NR”, and then press **ENTER**.
 - Some items may be greyed out. They are not selectable.
- 4

Press ▲▼ to select the desired level (Off, High, Low), and then press **ENTER**.

Quick Shoot

Improves LCD response when viewing fast-moving images. The effect is greater at low room temperatures (at or below 15°C/59°F).

- 1

Press **MENU** and the MENU screen displays.
- 2

Press ◀▶ to select “Option”.
- 3

Press ▲▼ to select “Quick Shoot”, and then press **ENTER**.
- 4

Press ◀▶ to select “On”, and then press **ENTER**.

NOTE

- Quick Shoot may cause image noise. If this occurs, turn the function “Off”.

Rotate

You can set the orientation of the picture.

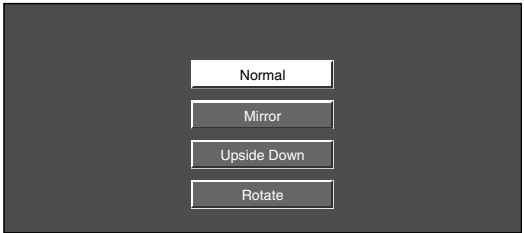
- 1

Press **MENU** and the MENU screen displays.
- 2

Press ◀▶ to select “Setup”.
- 3

Press ▲▼ to select “Rotate”, and then press **ENTER**.
- 4

Press ▲▼ to select the desired mode, and then press **ENTER**.



[Normal]: normal image.



[Mirror]: mirror image.



[Rotate]: rotated image.

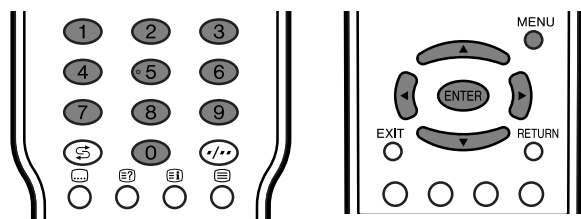


[Upside Down]: upside down image.



Password setting for child lock (for TV input mode)

Allows you to use a password to protect certain settings from being accidentally changed.



Setting a password (Changing a password)

Register a 4-digit password number to use the Child Lock function.

1 Press **MENU** and the MENU screen displays.

2 Press **◀/▶** to select "Setup".

3 Press **▲/▼** to select "Child Lock", and then press **ENTER**.

4 If you have already set the password, enter it here.

5 Press **▲/▼** to select "Change password", and then press **ENTER**.

6 Enter the 4-digit number as a password using **0 – 9**.

7

Enter the same 4-digit number as in step 6 to confirm.

- "The new password was registered." displays.

NOTE

- To view a locked channel (Lock setting in Programme Setup "Manual Adjust" is set to "On"), you must enter a password. (See page 26.) When you select a locked channel, a password prompt message pops up. Press **ENTER** to display the password input window.

Resetting the password

Allows you to reset your password.

1

Press **MENU** and the MENU screen displays.

2

Press **◀/▶** to select "Setup".

3

Press **▲/▼** to select "Child Lock", and then press **ENTER**.

4

Enter the password.

5

Press **▲/▼** to select "Reset", and then press **ENTER**.

6

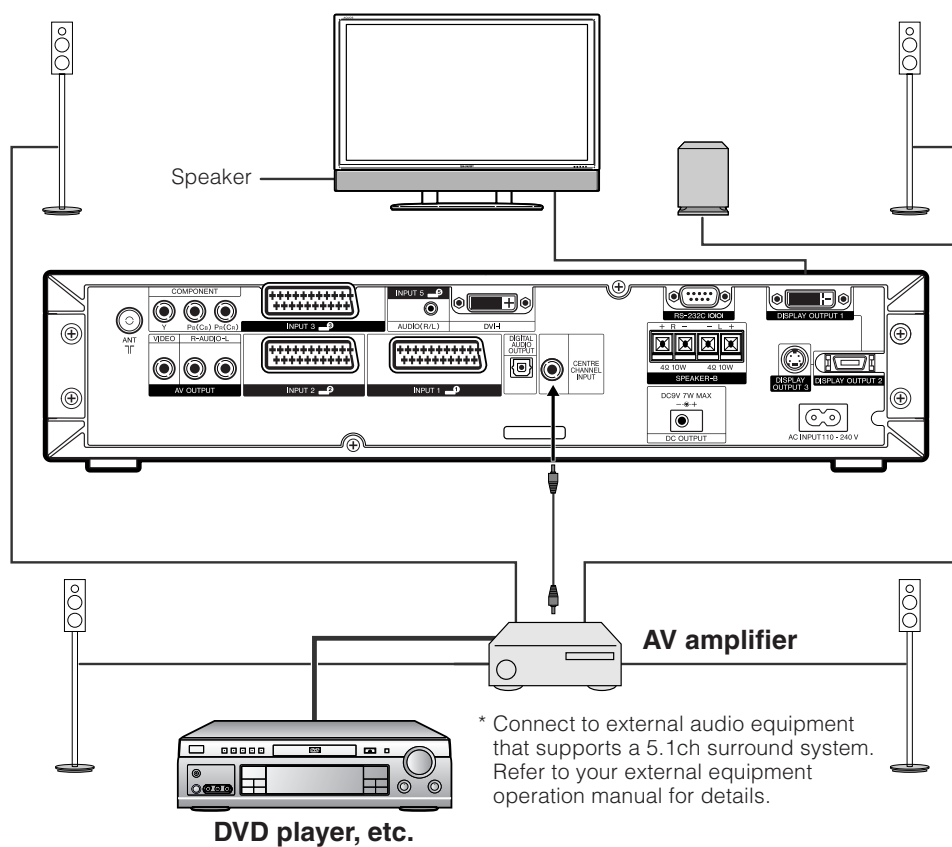
Press **◀/▶** to select "Yes", and then press **ENTER**.

NOTE

- **As a precautionary measure, make a note of your password and keep it in a familiar place. If you lose or forget your password, initialise the System to return all settings except for the TV channel settings to factory preset values. (See page 71.)**
- This function is available for TV input mode.

Centre Channel Input

You can use the speaker as the centre speaker when using a 5.1ch surround system.



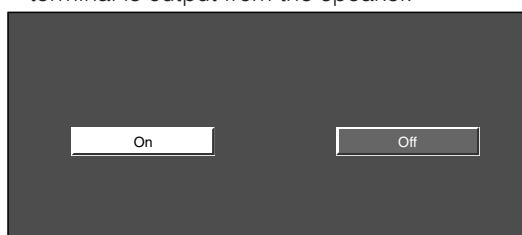
1 Press **MENU** and the MENU screen displays.

2 Press **◀▶** to select "Option", and then press **ENTER**.

3 Press **▲▼** to select "Centre Channel Input", and then press **ENTER**.

4 Press **◀▶** to select "On", and then press **ENTER**.

- Only the sound from the Centre Channel Input terminal is output from the speaker.



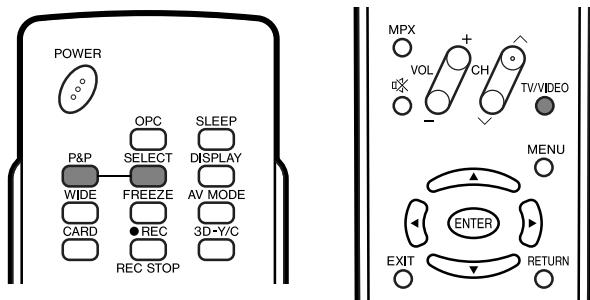
Useful features

Dual screen functions

Allows you to display two pictures on the screen at one time.

Dual screen

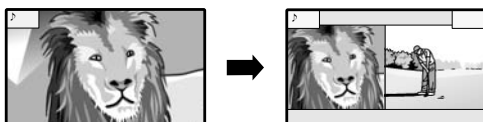
You can display two pictures except when inputting from the INPUT 5 terminal and card.



1

Press **P&P**.

- Dual screen displays and a selected input source image displays.



2

Press **SELECT** to set either screen to be active.

- “” displays on the active screen, which has sound output.

3

Press **TV/VIDEO** to select another input source on the active screen.

- A selected image displays.

4

Press **P&P** to exit dual screen.

NOTE

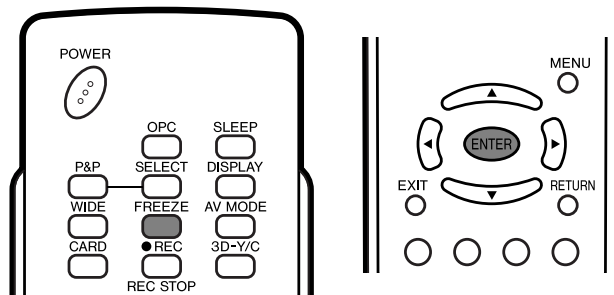
- This function does not work under the following input conditions:
 - ① INPUT 5 mode,
 - ② CARD mode,
 - ③ Two pictures from the same source (e.g. INPUT 1 and INPUT 1),
 - ④ Two pictures with different vertical frequency (e.g. PAL and PAL-60, PAL (50 Hz) and NTSC (60 Hz)),
 - ⑤ HDTV signal source (480P/1080i/720P) is input on the right side screen display.
- When you press **P&P**, the current input is moved to the left side screen display, and the previous input appears on the right side screen display. When the vertical frequencies of the two screens are different, such as in ④ above, you cannot acquire dual screen capability, even if you are pressing the button.

When you cannot acquire dual screen capability, perform one of the operations below.

 - Select another input whose vertical frequency is same as one of the current inputs (e.g. PAL and PAL).
 - Select a channel with no signal, then press **P&P**.
- When this function is not available, “No dual screen display available.” will display.

Picture and still image

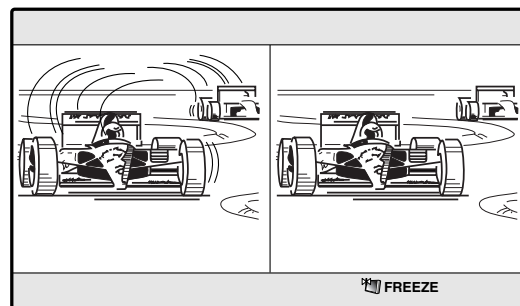
You can freeze a motion picture on the Display.



1

Press **FREEZE**.

- A moving image displays on the left screen and a still image displays on the right screen. The still image is one frame captured from a moving image at the moment you press **FREEZE**.



2

Update the still image by pressing **ENTER**.

- Each time you press **ENTER**, the image on the right screen updates.

3

Press **FREEZE** to exit still image.

NOTE

- This function does not work in INPUT 5 and CARD mode.
- When this function is not available, “No still image display available.” will display.
- Frozen image can be recorded on a PC card (see page 37).
- The still image automatically goes out after 30 minutes.

Teletext language setting

If Teletext information does not display correctly, perform the setting procedure below.

Select from among 4 kinds of language tables: West Europe, East Europe, Greek/Turkish, Cyrillic.

Each table is compatible with the Teletext languages listed below.

1

Press **MENU** and the MENU screen displays.

2

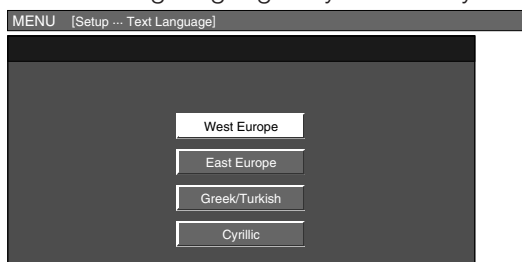
Press ◀▶ to select "Setup".

3

Press ▲▼ to select "Text Language", and then press **ENTER**.

4

Press ▲▼ to select the receivable teletext broadcasting language in your country.



- West Europe - English, French, Scandinavian, Czech, German, Spanish, Italian
- East Europe - Polish, French, Scandinavian, Czech, German, Slovenian/Croatian, Italian, Rumanian
- Greek/Turkish - English, French, Scandinavian, Turkish, German, Spanish, Italian, Greek
- Cyrillic - English, Russian, Estonian, Czech, German, Spanish, Ukrainian, Lettish

NOTE

- Teletext can display only when it is sent by a network. Not used to convert between languages.

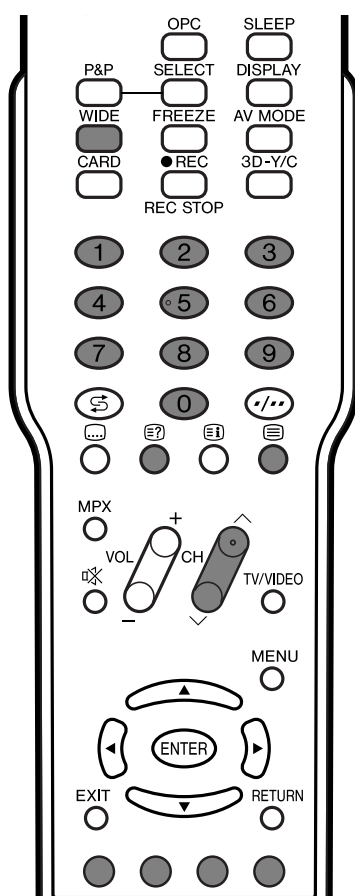
Teletext function

What is Teletext?

Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your System receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather report, sports information, stock exchange prices and programme previews are among the many services available.

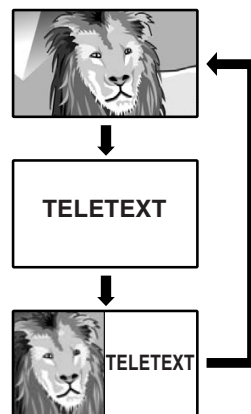
Teletext mode

Teletext is turned on/off with  on the remote control unit. You can operate your System in Teletext mode directly by inputting commands with the remote control unit.



Turning on and off Teletext

- 1** Select a TV channel or external input source providing the Teletext programme.
- 2** Press  to display the Teletext.
- 3** Press  again to display the Teletext on the right screen and normal image on the left screen.
 - Each time you press , the screen switches as shown upper right.
 - If you select a programme with no Teletext signal, "No Teletext available." is displayed.
 - The same message displays during dual screen or other modes if no Teletext signal is available.



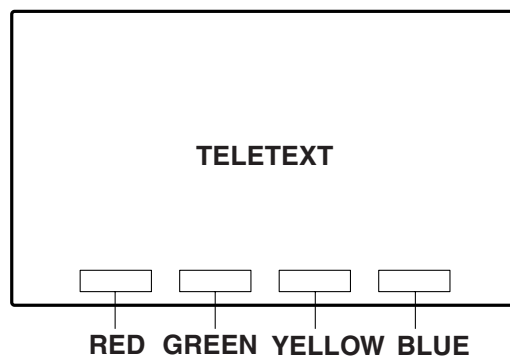
When viewing the Teletext information

- Press **CH**  to increase the page number.
- Press **CH**  to decrease the page number.

Button functions

Colour (RED/GREEN/YELLOW/BLUE):

You can select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding **Colour (RED/GREEN/YELLOW/BLUE)** on the remote control unit.

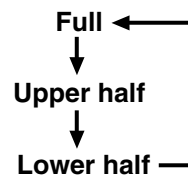


0 - 9:

Directly select any page from 100 to 899 by using **0 - 9**.

WIDE:

Each time you press **WIDE**, the TELETEXT image switches as shown below.



:

To reveal hidden information such as an answer to a quiz, press .

- Press  again to hide the information.

FREEZE:

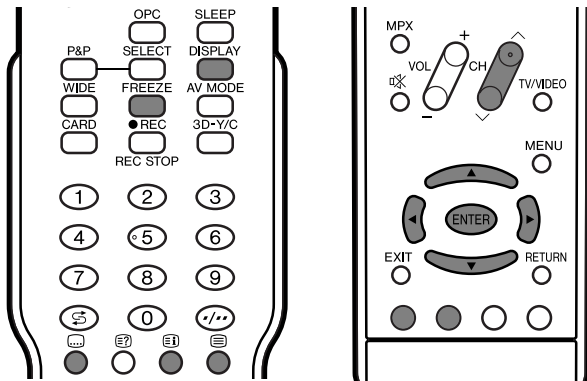
To stop updating Teletext pages automatically, press **FREEZE**.

- Press **FREEZE** again to release the hold mode.

Useful features

Displaying Subtitle

You can display several subtitles as they are transmitted.



1

Press to display the subtitle.

- Subtitle is updated by the information sent by the broadcasting station.
- To stop updating subtitle automatically, press **FREEZE**.

2

Press to exit the subtitle screen.

NOTE

- Subtitle will not be displayed when the service does not contain the subtitle information.

Time display

You can display the time information included in the Teletext broadcast.

1

Select a TV channel providing Teletext information.
(The time information is automatically captured.)

2

Press **DISPLAY**. The channel display will appear on the Display.

3

Press **DISPLAY** again within the three-second interval the channel display is on the screen.
Time information will display on the lower left of the screen for about three seconds.

4

Even when you change the TV channel, you can display the time information with steps 2 – 3 above.

NOTE

- The time display cannot be stored once the power is turned off. When you turn on the power, perform steps 1 – 4 again.
- If acquired successfully the time information will appear in the upper-right corner of the screen by pressing **MENU**.

Displaying TOP Overview

When receiving TOP Teletext, you can read a TOP text overview.

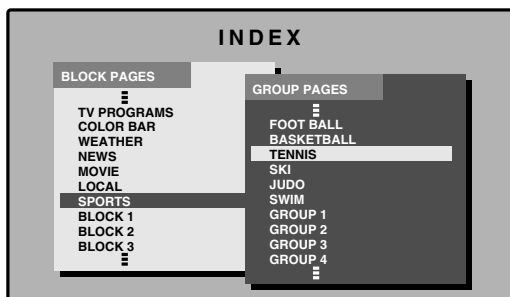
1

Press to display Teletext.

2

Press to display the TOP Overview as shown below.

TOP Overview screen



3

Select the desired block or group by using .

4

Press **ENTER** to display the selected block or group pages.

5

Press to exit the TOP Overview screen.

Appendix

Troubleshooting

Problem	Possible Solution
No power.	- Make sure the Display and the AVC System are connected correctly. (See page 7.) - Check if you pressed POWER on the remote control unit. (See page 17.) If the indicator on the Display lights up red, press POWER on the display. - Is the AC cord disconnected? (See page 13.) - Has the main power been turned on? (See page 17.)
Unit cannot be operated.	External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the power off the Display and the AVC System, or unplugging the AC cord and re-plugging it in after 1 or 2 minutes.
Remote control unit does not operate.	- Are batteries inserted with polarity (+ , -) aligned? (See page 12.) - Are batteries worn out? (Replace with new batteries.) - Are you using it under strong or fluorescent lighting? - Is a fluorescent light illuminated to remote control sensor?
Picture is cut off.	- Is the image position correct? (See page 48.) - Are screen mode adjustments such as picture size made correctly? (See pages 51 to 54.)
Strange colour, light colour, or dark, or colour misalignment.	- Adjust the picture tone. (See pages 29 to 31 and 54.) - Is the room too bright? The picture may look dark in a room that is too bright. - Check the colour system setting. (See pages 25 and 50.) - Check the input signal setting. (See page 49.) - Are both video cable and S-video cable connected to a SCART conversion connector? (See pages 44 and 45.)
Power is suddenly turned off.	- The unit's internal temperature has increased. Remove any objects blocking vent or clean. - Check the power control setting. (See page 33.) - Is sleep timer set? (See page 55.)
No picture.	- Is connection to other equipment correct? (See pages 44 to 46.) - Has input signal setup been done correctly after connection? (See page 49.) - Is the correct input selected? (See page 49.) - Is a non-compatible signal being input? (See page 63.) - Is picture adjustment correct? (See pages 29 to 31.) - Is the antenna connected properly? (See page 13.) - Is "On" selected in "Audio Only"? (See page 48.)
No sound.	- Is the volume too low? (See page 20.) - Is "Variable" selected in "Audio Out"? (See page 55.) - Is the speaker connected properly? - Is correct speaker output ("SPEAKER-A" or "SPEAKER-B") selected in "Speaker"? (See page 47.) - Is "On" selected in "Centre Channel Input"? (See page 57.) - Make sure that headphones are not connected. (See page 15.)

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
Storage temperature: -20°C to +60°C.

PC compatibility chart

PC/MAC	Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard
PC	VGA	640 x 400	31.5 kHz	60 Hz	
			37.9 kHz	85 Hz	O
		720 x 400	31.5 kHz	60 Hz	
			37.9 kHz	85 Hz	O
		640 x 480	31.5 kHz	60 Hz	O
			37.9 kHz	72 Hz	O
			37.5 kHz	75 Hz	O
			43.3 kHz	85 Hz	O
		WVGA	848 x 480	60 Hz	
	SVGA	800 x 600	35.1 kHz	56 Hz	O
			37.9 kHz	60 Hz	O
			48.1 kHz	72 Hz	O
			46.9 kHz	75 Hz	O
			53.7 kHz	85 Hz	O
	XGA	1024 x 768	48.4 kHz	60 Hz	O
			56.5 kHz	70 Hz	O
			60.0 kHz	75 Hz	O
			68.7 kHz	85 Hz	O
	WXGA	1280 x 720	45.0 kHz	60 Hz	
		1280 x 768	48.1 kHz	60 Hz	
		*1366 x 768	48.4 kHz	60 Hz	
	SXGA	1280 x 1024	64.0 kHz	60 Hz	O
MAC13"	VGA	640 x 480	34.9 kHz	67 Hz	
MAC16"	SVGA	832 x 624	49.7 kHz	75 Hz	
MAC19"	XGA	1024 x 768	60.2 kHz	75 Hz	

* 1366 x 768 (resolution) only applies to Analogue signal (NOT compatible with Digital signal).

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Power Management is a registered trademark of Sun Microsystems, Inc.
VGA and XGA are registered trademarks of International Business Machines Co., Inc.

Connecting pin assignments for SCART

Various audio and video devices may be connected via the SCART terminals.
Use SCART cable when inputting RGB signal. (INPUT1/INPUT3)

SCART (INPUT 1)

1. Audio right output (TV Monitor out)

2. Audio right input

3. Audio left output (TV Monitor out)

4. Common earth for audio

5. Earth for blue

6. Audio left input

7. Blue input
8. Audio-video control

9. Earth for green

10. Not used

11. Green input

12. Not used

13. Earth for red

14. Not used

SCART (INPUT 2)

1. Audio right output

2. Audio right input

3. Audio left output

4. Common earth for audio

5. Earth

6. Audio left input

7. Not used
8. Audio-video control

9. Earth

10. AV LINK control

11. Not used

12. Not used

13. Earth

14. Not used

SCART (INPUT 3)

1. Audio right output

2. Audio right input

3. Audio left output

4. Common earth for audio

5. Earth

6. Audio left input

7. Blue input
8. Audio-video control

9. Earth

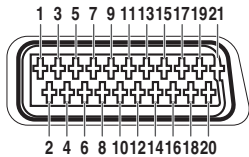
10. Not used

11. Green input

12. Not used

13. Earth

14. Not used



15. Red input

16. Red/Green/Blue control

17. Earth for video

18. Earth for Red/Green/Blue control

19. Video output (TV Monitor out)

20. Video input

21. Plug shield

15. Chroma S-Video input

16. Not used

17. Earth for video

18. Earth

19. TV Monitor output

20. Video input/S-video input

21. Plug shield

15. Red input/Chroma S-Video input

16. Red/Green/Blue control

17. Earth for video

18. Earth

19. TV Monitor output

20. Video input/S-video input

21. Plug shield

RS-232C port specifications

PC Control of the System

- When a program is set, the System can be controlled from the PC using the RS-232C terminal.
The input signal (PC/video) can be selected, the volume can be adjusted and various other adjustments and settings can be made, enabling automatic programmed playing.
- Attach an RS-232C cable cross-type (commercially available) to the supplied Din/D-sub RS-232C for the connections.

NOTE

- This operation system should be used by a person who is accustomed to using PCs.

Communication conditions

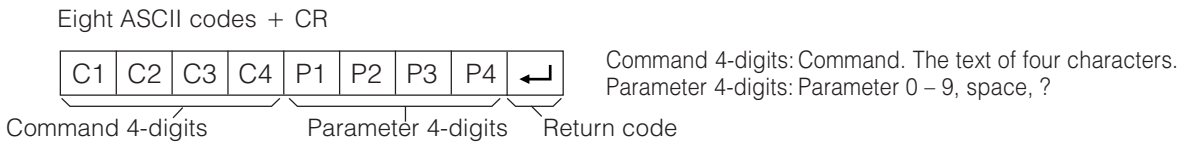
Set the RS-232C communications settings on the PC to match the display's communications conditions. The display's communications settings are as follows:

Baud rate:	9,600 bps
Data length:	8 bits
Parity bit:	None
Stop bit:	1 bit
Flow control:	None

Communication procedure

Send the control commands from the PC via the RS-232C connector.
The Display operates according to the received command and sends a response message to the PC.
Do not send multiple commands at the same time. Wait until the PC receives the OK response before sending the next command.

Command format



Parameter

Input the parameter values, aligning left, and fill with space (s) for the remainder. (Be sure that four values are input for the parameter.)
When the input parameter is not within an adjustable range, "ERR" returns. (Refer to "Response code format".)

0			
0	0	0	9
–	3	0	
1	0	0	
0	0	5	5

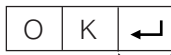
When "?" is input for some commands, the present setting value responds.

?			
?	?	?	?

Appendix

Response code format

Normal response



Return code (0DH)

Problem response (communication error or incorrect command)



Return code (0DH)

Commands

CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
POWER SETTING	P O W R	0 _ _ _	POWER OFF (STANDBY)
INPUT SELECTION A	I T G D	x _ _ _	INPUT SWITCHING (TOGGLE)
	I T V D	x _ _ _	TV (CHANNEL FIXED)
	I A V D	* _ _ _	INPUT1 – 5 (1 – 5)
	I C R D	x _ _ _	CARD
CHANNEL	D C C H	* _ _ _	TV DIRECT CHANNEL (1 – 99)
	C H U P	x _ _ _	CHANNEL UP
	C H D W	x _ _ _	CHANNEL DOWN
INPUT SELECTION B	I N P 1	0 _ _ _	INPUT1 (CVBS)
	I N P 1	1 _ _ _	INPUT1 (RGB)
	I N P 2	0 _ _ _	INPUT2 (CVBS)
	I N P 2	1 _ _ _	INPUT2 (Y/C)
	I N P 3	0 _ _ _	INPUT3 (CVBS)
	I N P 3	1 _ _ _	INPUT3 (Y/C)
	I N P 3	2 _ _ _	INPUT3 (RGB)
	I N P 3	3 _ _ _	INPUT3 (COMPONENT)
	I N P 4	0 _ _ _	INPUT4 (AUTO)
	I N P 4	1 _ _ _	INPUT4 (S-VIDEO)
	I N P 4	2 _ _ _	INPUT4 (VIDEO)
	I N P 5	0 _ _ _	Digital PC
	I N P 5	1 _ _ _	Analogue PC
	I N P 5	2 _ _ _	Digital AV
	I N P 5	3 _ _ _	Analogue AV
AV MODE SELECTION	A V M D	0 _ _ _	TOGGLE
	A V M D	1 _ _ _	STANDARD
	A V M D	2 _ _ _	MOVIE
	A V M D	3 _ _ _	GAME
	A V M D	4 _ _ _	USER
	A V M D	5 _ _ _	DYNAMIC
VOLUME	V O L M	* _ _ _	VOLUME (0 – 60)

CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
POSITION	H P O S	* * * _	H-POSITION (AV) (– 10 – +10)
	H P O S	* * * _	H-POSITION (PC) (0 – 180)
	V P O S	* * * _	V-POSITION (AV) (– 20 – +20)
	V P O S	* * * _	V-POSITION (PC) (0 – 100)
	C L C K	* * * _	CLOCK (0 – 180)
	P H S E	* * * _	PHASE (0 – 40)
WIDE MODE	W I D E	0 _ _ _	TOGGLE (AV)
	W I D E	1 _ _ _	NORMAL (AV)
	W I D E	2 _ _ _	ZOOM 14:9 (AV)
	W I D E	3 _ _ _	PANORAMA (AV)
	W I D E	4 _ _ _	FULL (AV)
	W I D E	5 _ _ _	CINEMA 16:9 (AV)
	W I D E	6 _ _ _	CINEMA 14:9 (AV)
	W I D E	7 _ _ _	NORMAL (PC)
	W I D E	8 _ _ _	CINEMA (PC)
	W I D E	9 _ _ _	FULL (PC)
MUTE	M U T E	0 _ _ _	TOGGLE
	M U T E	1 _ _ _	MUTE
	M U T E	2 _ _ _	MUTE OFF
DOLBY VIRTUAL	A C D V	0 _ _ _	TOGGLE
	A C D V	1 _ _ _	ON
	A C D V	2 _ _ _	OFF
DUAL SCREEN	T W I N	0 _ _ _	DUAL SCREEN OFF
	T W I N	1 _ _ _	DUAL SCREEN ON
AUDIO CHANGE	A C H A	x _ _ _	TOGGLE
SLEEP TIMER	O F T M	0 _ _ _	OFF
	O F T M	1 _ _ _	SLEEP TIMER 30 MIN
	O F T M	2 _ _ _	SLEEP TIMER 1 HOUR
	O F T M	3 _ _ _	SLEEP TIMER 1 HOUR 30 MIN
	O F T M	4 _ _ _	SLEEP TIMER 2 HOUR
	O F T M	5 _ _ _	SLEEP TIMER 2 HOUR 30 MIN
TEXT	T E X T	0 _ _ _	TEXT OFF
	T E X T	1 _ _ _	TEXT ON (TOGGLE)
	D C P G	* * * _	DIRECT PAGE JUMP (100 – 899)

NOTE

- If an underbar (_) appears in the parameter column, enter a space.
- If an asterisk (*) appears, enter a value in the range indicated in brackets under CONTROL CONTENTS.

Specifications

Item				65" LCD COLOUR TV, Model:LC-65G5X (Display) TU-65GAX (AVC System)
LCD panel				65" (164 cm) Advanced Super View & BLACK TFT LCD
Number of dots				6,220,800 dots (1920 × 1080 × 3 dots)
Video Colour System				PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60
TV Function	TV-Standard (CCIR)		PAL: B/G, D/K, I SECAM: B/G, D/K, L, L'	
	Receiving Channel	VHF/UHF	44.25-863.25 MHz	
		CATV	Hyper-band, S1–S41ch	
	TV-Tuning System		Auto Preset 99 ch, Auto Label, Auto Sort	
	STEREO/BILINGUAL		NICAM/A2	
Brightness				450 cd/m²
Backlight life				60,000 hours (at Backlight Standard position)
Viewing angles				H : 170° V : 170°
Audio amplifier				10W × 2
Speakers				Ø 8 cm 2pcs, Ø 2.5 cm 2pcs
Terminals	AVC System	Rear	ANTENNA IN	UHF/VHF 75 Ω Din type
			INPUT 1	SCART (AV input, RGB input, TV output)
			INPUT 2	SCART (AV input/output, Y/C input, AV Link)
			INPUT 3	SCART (AV input/output, Y/C input, RGB input), RCA pin (Component input)
			INPUT 5	Ø 3.5 mm jack (Audio input), DVI-I (DVI-I input)
			AV OUTPUT	RCA pin (AV output) *Audio: Variable/Fixed
			DC OUTPUT	DC9V 7W MAX
			SPEAKER-B	External speaker output terminal (L and R)
			CENTRE CHANNEL INPUT	RCA pin
			Digital-AUDIO OUTPUT	Square type optical digital audio connector (S/PDIF)
			RS-232C	D-sub 9pin male connector
		Front	INPUT 4	S-VIDEO (Y/C input), RCA pin (AV input)
			Headphones	Ø 3.5mm jack (Audio output)
			PC Card slot	PC Card Type II (PC Card Adaptor)
OSD language				English/Chinese/Arabic
Power Requirement				AC 110–240 V, 50 Hz
Power Consumption	AVC System		44 W (0.6 W Standby)	
	Display		515 W (1.0 W Standby) (Method IEC60107)	
Weight	AVC System		6.9 kg (w/o stand), 7.1 kg (with stand)	
	Display		62.0 kg (Display only), 68.5 kg (with Display and speakers), 76.5 kg (with Display, speakers and stand)	
Operating Temperature				0°C - 40°C

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Optional accessory

The listed optional accessory is available for the LCD colour TV. Please purchase it at your nearest shop.

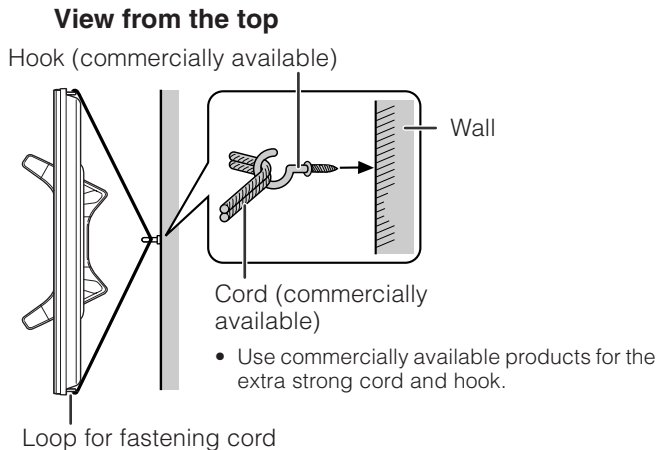
- Additional optional accessories may be available in the near future. When purchasing, please read the newest catalogue for compatibility and check the availability.

Part name	Part number
Wall mount bracket	AN-65AG1

Protection against overturning

Anchoring the Display to a wall or pillar

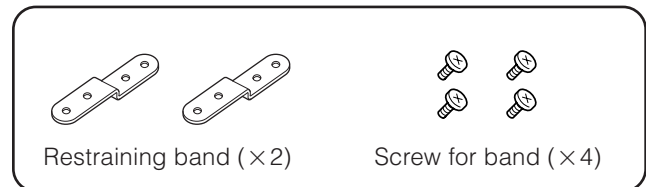
Fasten the Display to the wall or pillar, using an extra strong cord and a hook (commercially available).



Securing the stand to a table or floor

Secure the stand to a table or to the floor using the supplied safety restraints. Attach the supplied restraining bands to the stand by following Procedure “A” or “B”.

Safety restraints (supplied)

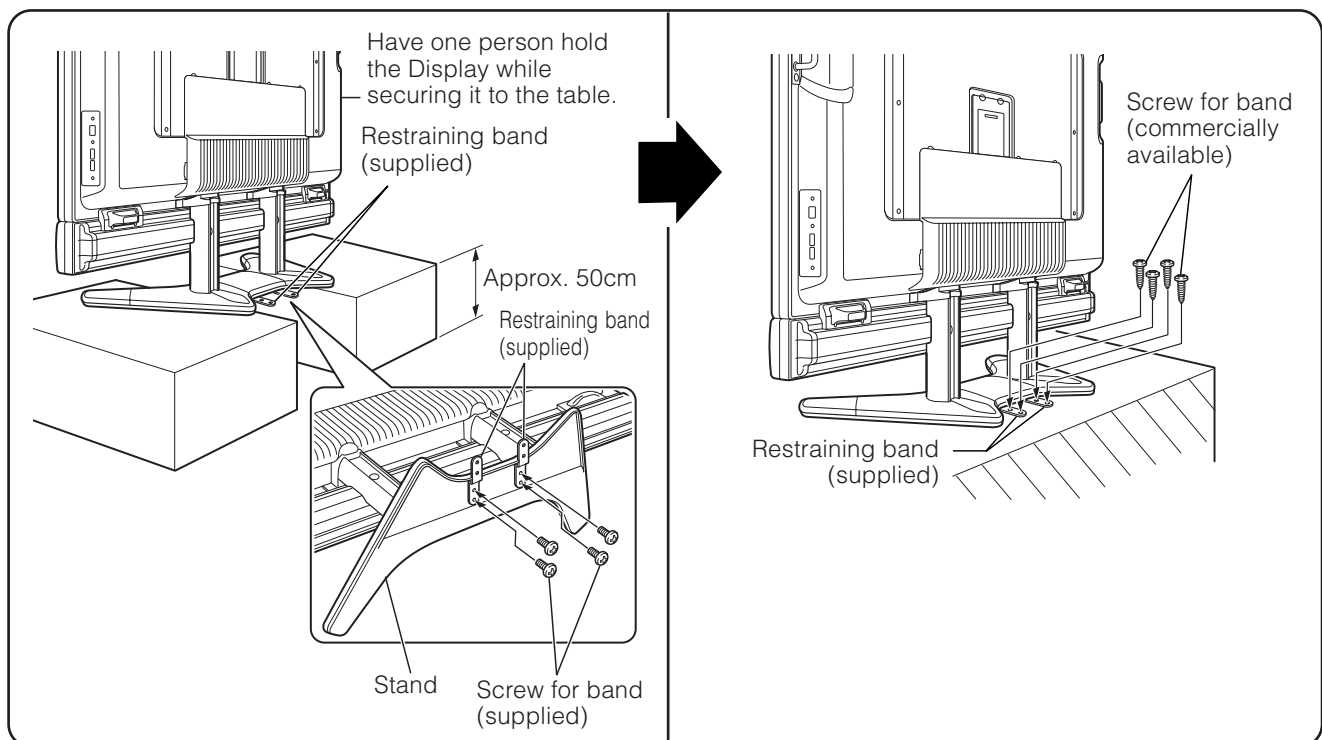


CAUTION

- Be sure to use at least two people when moving the Display.

A. Securing the safety restraints onto a table

- Prepare two tables of the same height.
- Use long and wide tables strong enough to hold the Display's weight (approximately 77 kg).
- Do not place the Display onto an unstable table while attaching the restraining bands.

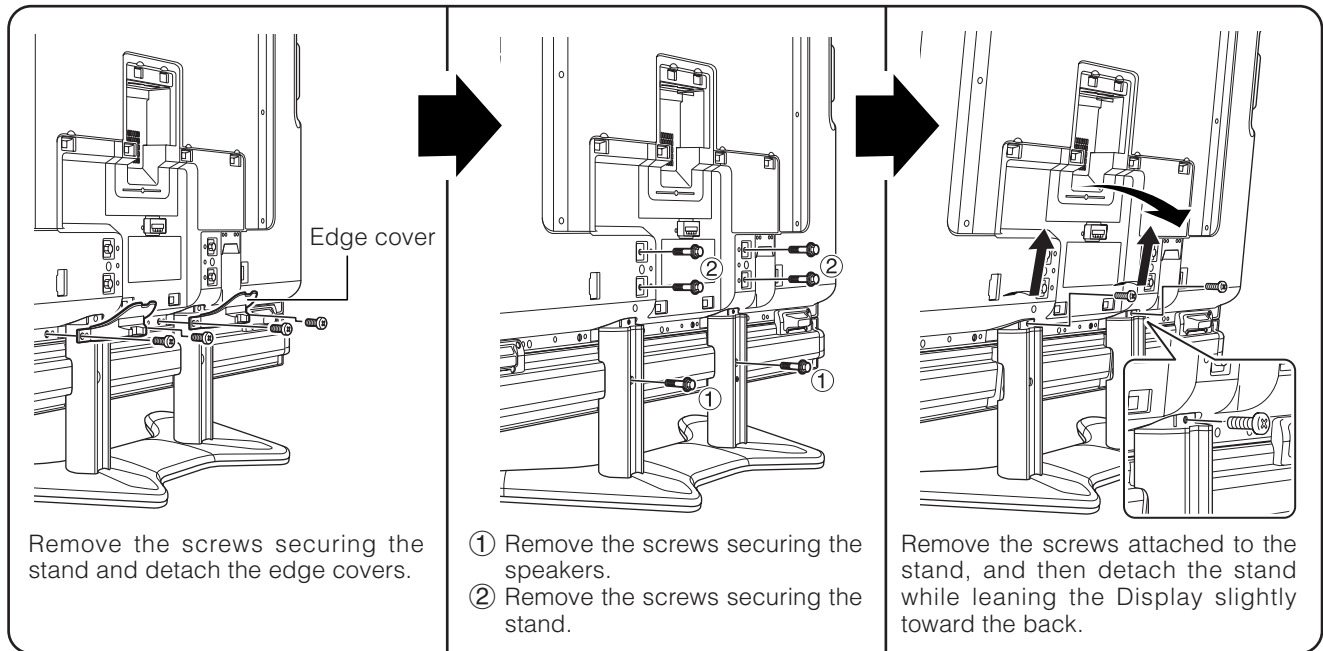


Appendix

■ B. When there is no appropriate table

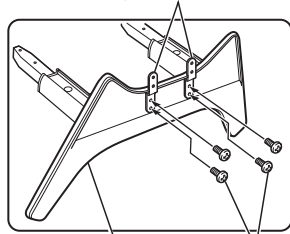
- With the Display upright, remove the stand and attach the safety restraints.

1. Detach the stand.



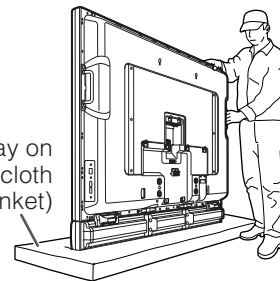
2. Place the Display on a soft, thick cloth and have one person hold it so that it won't overturn. Then attach the restraining bands to the detached stand.

Restraining band (supplied)



Stand Screw for band (supplied)

Place the Display on a soft, thick cloth (ex. Blanket)



3. Reverse the procedure described in Step 1 to re-attach the stand to the Display.

4. As in Procedure "A", secure the stand to the floor or a platform using commercially available screws.

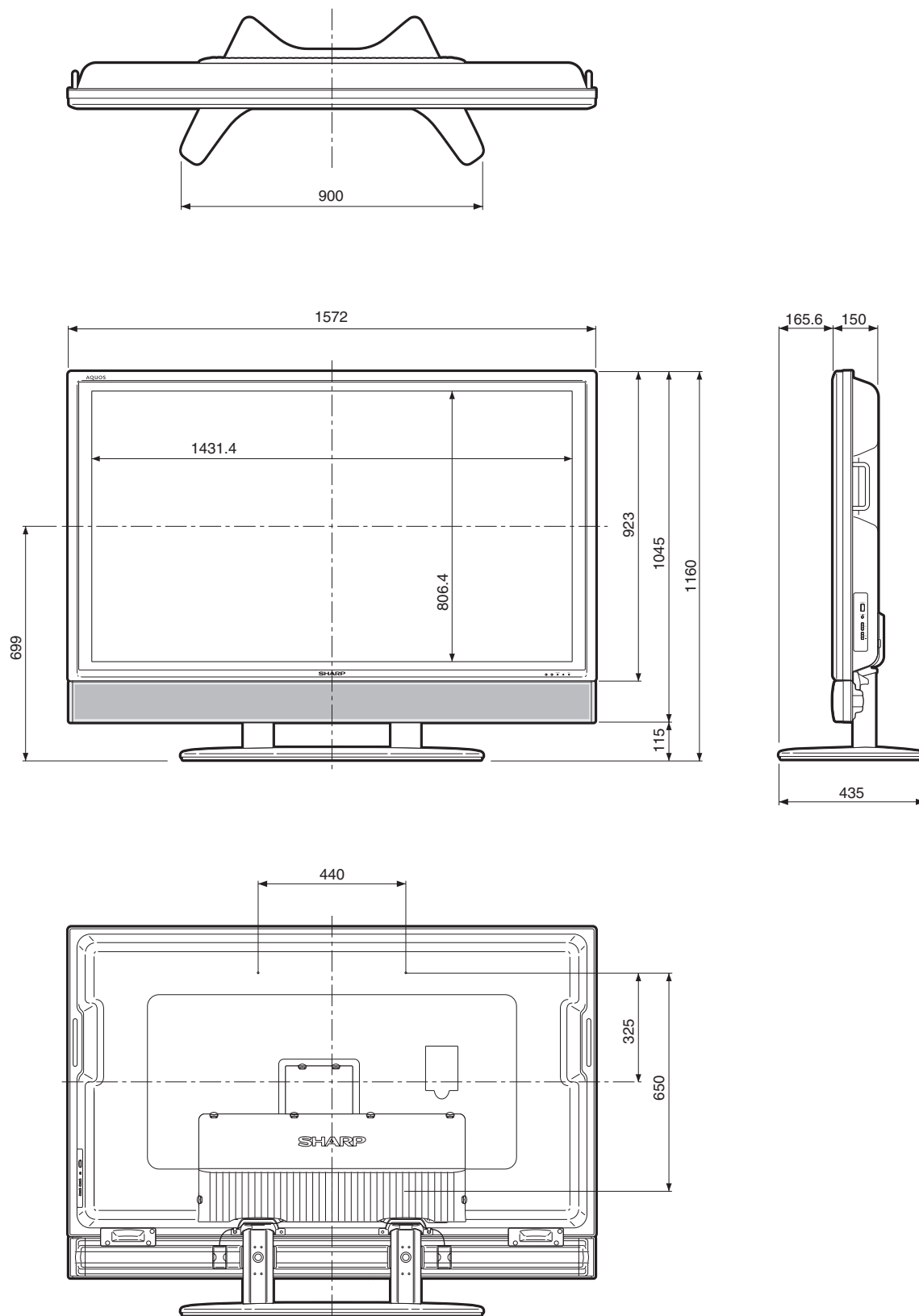
NOTE

- The supplied safety restraints are used for preventing an accident caused by overturn of this product. SHARP cannot compensate for damage or injury caused by the collapse of this product due to natural disasters or misuse of the safety restraints.

Dimensional drawings

Display

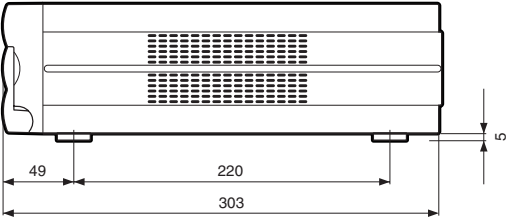
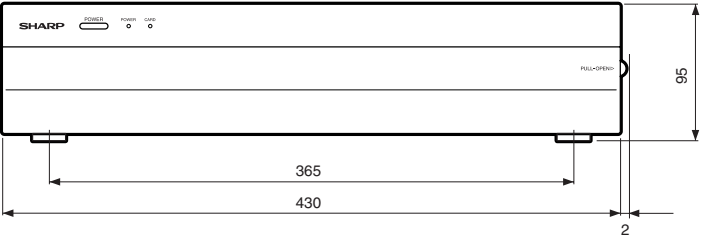
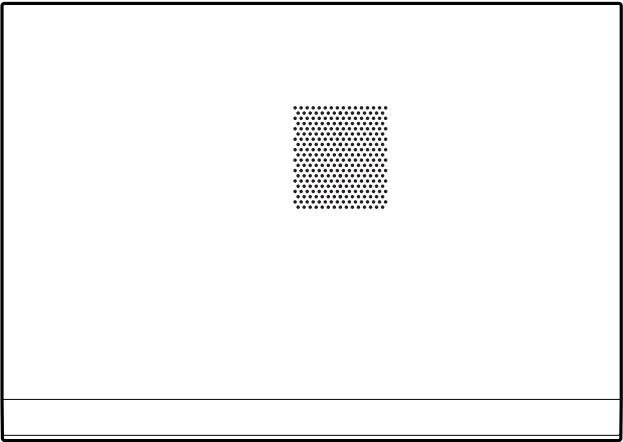
Unit: mm



Dimensional drawings

AVC System

Unit: mm



HOW TO SET THE FACTORY PRESETS

Turn off the Display by pressing **POWER** on the Display.

Press and hold down **RESET** on the AVC System and press **POWER** on the Display to turn on the System. All setting items (except TV channel) return to the factory presetting.

NOTE

- Running the factory presetting operation also clears the password.

You can run the Auto Installation again by using the following steps.

- 1 Turn on the power of the Display and the AVC System.
- 2 Press **MENU**. (Make sure the menu screen displays.)
- 3 Press ◀▶ to select "Setup".
- 4 Press ▲▼ to select "Auto Installation", and then press **ENTER**.
- 5 Press ◀▶ to select "Yes", and then press **ENTER**.



The password is

--	--	--	--

.

NOTE

- As a precautionary measure, make a note of your password above, scissor it from this manual, and keep it in a familiar place.

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AUSTRALIA

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This Sharp product is warranted against faults in materials and manufacture for a period of twelve (12) months from the date of original purchase.

If service is required during the warranty period, please contact your nearest Sharp Approved Service Centre. These repairs would be carried out at no charge to the owner, subject to the conditions specified herein.

The owner is responsible for any transportation and insurance costs if the product has to be returned for repair.

This warranty does not extend to accessories or defects or injuries caused by or resulting from causes not attributable to faulty parts or the manufacture of the product, including but not limited to, defect or injury caused by or resulting from misuse, abuse, neglect, accidental damage, improper voltage, liquid spillage, vermin infestation, software, or any alterations made to the product which are not authorised by Sharp.

Please retain your sales documentation, as this should be produced to validate a warranty claim.

This warranty is in addition to and in no way limits, varies or excludes any express and implied rights and remedies under any relevant legislation in the country of sale.

IMPORTANT

DO NOT RETURN THIS DOCUMENT TO SHARP

For your reference, please enter the particulars of your purchase below and retain, with your purchase documentation.

Model No. _____

Serial No. _____

Date of Purchase _____

Retailer _____

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SHARP CORPORATION OF
AUSTRALIA PTY. LIMITED
ABN 40 003 039 405
1 Huntingwood Drive
Huntingwood NSW2148
SHARP CORPORATION OF
NEW ZEALAND LIMITED
59 Hugo Johnston Drive
Pentecost Auckland
SPform030 (JUNE 2004)

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